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Language in and out of society: Converging critiques of the Labovian paradigm

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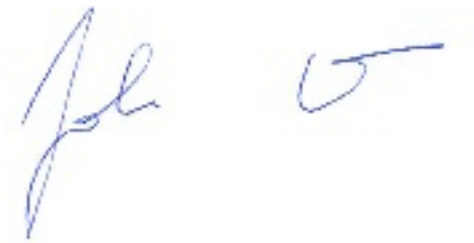
SIGNED DECLARATION

I declare that the thesis has been composed by myself and that the work has not been submitted for any other degree or professional qualification. I confirm that the work submitted is my own, except where work which has formed part of jointly-authored publications has been included. My contribution and those of the other authors to this work have been explicitly indicated below. I confirm that appropriate credit has been given within this thesis where reference has been made to the work of others.

The work presented in chapter 2 was previously published in *Language Sciences* as 'The meaning change of *hayır* during the Turkish constitutional referendum 2017' by **Johannes Woschitz** and Emre Yağlı. This study was conceived by all of the authors. I carried out the literature review, the discussion and parts of the data analysis. My colleague Emre was responsible for data collection and data analysis.

The work presented in chapter 3 was previously published in *Language & Communication* as 'Language in and out of society: Converging critiques of the Labovian paradigm' by me.

The work presented in chapter 4, again written entirely by me, is currently under review with *Philosophy of Science* as 'Scientific realism and linguistics: Two stories of scientific progress'.



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LAY SUMMARY

Languages change all the time. Present-day English is different from the English spoken 500 years ago, as words are now pronounced in a different way. For instance, most words with an *ai* sound (e.g. *mice*) used to be pronounced with a long *i* in Middle English (this pronunciation is often preserved in the spelling, compare *mice*, *lice*, *rice, twice*, etc.). Even present-day languages are changing, such as English spoken in the United States, where many speakers, starting around the 1960s, have replaced the *æ* sound in *man* with the one in *bed*.

Changes like these typically affect millions of speakers, and it remains an open question how such a regularity can come about. One route of explanation sought by linguists is that speakers subconsciously adjust the positions of their tongues to ensure that the distances between the pronunciations of *e*, *i*, *a*, etc., are roughly equal. In the pronunciation of British English *a* (as in *bath*), for instance, the tongue approaches the low back end of the mouth, while in *e* (as in *bed*), it is more fronted. This leaves enough distance between them so that speakers are able to distinguish between the two vowels. If the pronunciation of *a* started to change (for instance because of language contact between two speech communities), it could run the risk of becoming indistinguishable from *e*. Speakers would then adjust their pronunciation of *e* in order to ensure that the two vowels remain distinguishable. Every speaker, in this logic, has a cognitive representation of where the pronunciations of their vowels are located in their oral cavity. If the pronunciation of a vowel changes, they "update" this representation by adjusting the pronunciation of other vowels to maintain contrast.

Quite recently, scholars have begun to pay more attention to the fact that whenever groups of speakers change the pronunciation of a vowel, they project a certain kind of identity to the outside. When speakers from the North of the United States pronounce *man* with the same vowel as in *bed*, for instance, they could do so to distance themselves from the South of the United States. As linguists have started to explore such routes of explanations, it has become increasingly questionable whether a

cognitive mechanism in the sense of above that controls the physical distance between tongue positions actually exists. Increasingly often, linguists refrain from referring to such principles in their explanation of large-scale sound change.

This marks a significant change of thinking within linguistics. Many concepts that were once believed to explain multigenerational language change are now treated as stand-ins for other explanations, often grounded in the social functionality associated with the change. In this thesis, I try to make this change of thinking as explicit as possible. I claim that this an important thing to do, as what I discuss has implications not only for linguists but also for cognitive and social scientists interested in how languages and societies interrelate.

ABSTRACT

In this thesis, I discuss, from a metatheoretical perspective, how variationist sociolinguistics seems to be undergoing a paradigm shift in the Kuhnian sense. Roughly around the turn of the millennium, sociolinguists interested in the study of phonological change have shifted their focus from sociological macro-categories like social class or gender to social performativity and indexical meaningfulness in language variation. While some have theorised this development as a methodological extension of already existent work (Eckert, 2012), I locate here a radical theory change – an ontological breach with important consequences. What seems to be at stake is not the reliance on monolithic social categories but the 'narrow interface between language and society' (Labov, 2001, p. 28) from the early days. In other words, the orthodox conception of language change as language-internal factors 'unfolding' themselves in a speech community is being overthrown.

The main body of this thesis comprises three papers, two of which have already been published (Woschitz, 2019; Woschitz & Yağlı, 2019), one of which is currently under review (Woschitz, under review). In Woschitz and Yağlı (2019), my colleague and I provide a case study of lexical meaning change in the course of the run-up to the Turkish constitutional referendum 2017. We argue that language change, be it lexical or phonological, cannot be separated from the sociocultural surroundings in which it takes place. Woschitz (2019) surveys how Labov himself has quarrelled with this fact in his own work, and how, in an œuvre that spans 50 years, he has adjusted his theoretical framework to rise to the challenge. Part of the described reorientations have been initiated by so-called third-wave variationism, with Eckert (2012) leading the way, but epistemological tensions in Labov's treatment of language and society have been present from the start. Third-wave variationism, in turn, is still sorting out the consequences of the radical reorientations it proposes.

Woschitz (under review) zooms out for the big picture. In this paper, I draw a parallel between the history of Labovian sociolinguistics and Chomskyan syntax. Even though these two linguistic subdisciplines are rather different in nature, I argue that their

theoretical reorientations over the past 60 years share certain philosophical similarities. Here, I turn to the philosophy of science, particularly to the scientific realism debate, to assess whether one can identify in their developments a common denominator that warrants talking about scientific progress in the broad sense. I argue that linguists turning away from Universal Grammar and internal factors in their explanations of language-related phenomena is indicative of a broader trend within linguistics – a reverse trend that problematises linguistic autonomy that was envisaged by linguists in the past 200 years (Joseph, 2002, chapter 3).

CONTENTS

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CHAPTER 1: INTRODUCTION

Over the last years, metatheoretical discussions have become part of a mainstream discourse within sociolinguistics. Coupland's (2016c) edited volume *Sociolinguistics: Theoretical Debates*, for instance, surveys current theoretical challenges circling large-scale phonological change, indexicality, superdiversity and language embodiment in the pursuit of an all-encompassing theory of 'sociolinguistic change'. Sociolinguists of all kinds, so the narrative goes, should cooperate to contribute to a holistic social theory (on which see Bell, 2016; Coupland, 1998, 2016a). For many, this seems rather programmatic, but at the same time, it seems that considerable progress has been made towards achieving what Coupland envisages. Gone are the days in which sociolinguists contented themselves with establishing broad correlations between linguistic variables and sociological categories, such that one can say that the working class speak like X, or that women speak like Y. It is now frowned upon to not consider in one's theorising how class or gender is systematically performed in everyday life.

Sociolinguistics has clearly come a long way ever since it has been established as a mainstream subdiscipline of linguistics in the 1960s. But how exactly it has arrived at its current position – that is, by virtue of what broader philosophical movements the field has developed and what kinds of detours it has made in the process – is less clear and still a matter of controversy. Figueroa (1994) is a useful reference point, but not many sociolinguists have set out to continue her line of work to the present day. In mainstream Labovian sociolinguistics, for instance, it is not clear whether one can witness ontological continuity in how the language/society interface has been theorised over the years. The present thesis is devoted to addressing this question. By triangulating empirical sociolinguistic work, contemporary history and philosophy of science, I shall theorise scientific progress within Labovian sociolinguistics, make explicit where epistemological tensions lie in contemporary scholarship and how they came about, and reconcile these with the historical *Zeitgeist* academia can never be separated from. As such, the thesis can be seen to contribute to linguistic

historiography, discussing, among other things, the structuralist heritage in sociolinguistics.

A story of progress often told in variationist sociolinguistics circles is Eckert's (2012) wave-model. Eckert conceives of variationist sociolinguists as having progressed, over the years, along three loosely-ordered theoretical waves. She claims that Labovian variationism of the 1960s and 1970s – so-called 'first-wave variationism' – has been mainly concerned with 'broad correlations between linguistic variables and the macrosociological categories of socioeconomic class, gender, ethnicity, and age' (Eckert, 2012, p. 67). For first-wave variationists, it has been sufficient to make claims like "in sound change that happens below the level of conscious awareness, the lower middle class most likely leads", to echo Labov (1972b, 2006 [1966]). Along came the second wave, which applies 'ethnographic methods to explore the local categories and configurations that inhabit, or constitute, these broader categories' (Eckert, 2012, p. 67). An example of this is Eckert's (1989a) own study of social categories in high schools. In North American high schools, she argues, social class is not the immediately salient 'axis of differentiation' (Gal, 2016b) as often is in adult life. It is the peer-based social order that counts for the students, in her case whether one belongs to the category of Jocks or Burnouts. Jocks are most likely to attend college after high school and largely restrict their social environment to school activities. The Burnouts, on the other hand, are likely to take up a blue-collar occupation later in life and maintain social ties outside school to ease their entry in the job market. These social categories are evidently mediated by social class: whether one has ambitions and the means to attend college is, to a large extent, dependent on one's socioeconomic background. But socioeconomic background is, in the eyes of students, an epiphenomenon of the Jock/Burnout opposition. No student is categorically denied membership to either category, irrespective of their own socioeconomic background. What is important is that every student has to position themselves in the social nexus with reference to this opposition – even so-called 'in-betweens' (Eckert, 2018, p. 34), neither Jocks nor Burnouts, who make up the majority of students.

Locally-relevant social categories like these, Eckert argues, underlie the often-reproduced pattern that, on average, younger people from the lower middle class lead in phonological changes (see Labov, 1972b). For instance, the Northern Cities Shift, an ongoing vowel chain shift in the Inland North of the United States, was found to spread from urban centres (Labov, Yaeger, & Steiner, 1972). In the ethnographic suburban setting, Burnouts were found to lead in the use of advanced variants of the Northern Cities Shift, with Jocks trailing (Eckert, 2018, pp. 64-65, 77-78). This makes sense when considering the fact that it is they, not Jocks, who have social ties to urban centres. That they adapt their way of speaking to urban speech becomes an index of their outgoingness beyond school.

In the Third wave, finally, such locally-situated meaning of variation is treated 'as an essential feature of language. Variation constitutes a social semiotic system capable of expressing the full range of a community's social concerns' (Eckert, 2012, p. 94). Here, the focus shifts entirely from treating a sociolinguistic variable as an emblem of category membership (to an age cohort, social class, gender group, etc.) to the notion of style. Variation is studied in how it relates to the construction and projection of personae, social stereotypes like a Valley Girl, Burnout or Jock; to navigate through social landscapes (Eckert, 2019).

Eckert has been eager to clarify that her wave-model is to be conceived of as an elaboration of the previous ones, rather than a marked shift from received opinions:

> The unfortunate aspect of the wave metaphor is that it has often been taken to mean that each wave supersedes the previous one. I would say that each wave refines aspects of the previous one, but it has always been clear that the basic ideas of each wave have always been implicit in the earlier waves. (Eckert, 2018, p. xi)

This is the starting point of my thesis, part of which shall be devoted to scrutinising whether this is a whig-historical account that papers over theory-change. Where third-wave variationists see a methodological extension of the orthodox Labovian paradigm, I shall identify a radical theory change – an ontological breach or an incipient scientific revolution in the Kuhnian sense (on which see chapter 4). The radical theory change, however, is not manifested in the criticism of social macro-categories such as social

class or gender but in the renunciation of the 'narrow interface between language and society' (Labov, 2001, p. 28) from the early days. As shall be discussed in chapter 3, first-wave variationism tends to treat 'social structure' as a material substratum that carries forward language change dictated by 'language-internal' factors. Third-wave variationists seem to be turning the table by treating – rather hesitantly – much of what previously fell under language-internal principles as theoretical artefacts devoid of ontological status.

At the same time, however, first-wave variationism is not as monolithic as suggested in the model. In Labov's trilogy *Principles of Linguistic Change* (1994, 2001, 2010), a similar ontological breach seems to have occurred between *Internal Factors* (1994) and *Social Factors* (2001) on the one hand, and *Cognitive and Cultural Factors* (2010) on the other hand – though a certain epistemological tension in his treatment of language and society has been present from the start. Care must be taken, therefore, to not suppose strict historical linearity in describing looming theoretical reorientations. One can find remnants of old dogmas even in Labov's and Eckert's most recent work, culminating, perhaps, in their recent joint paper (Eckert & Labov, 2017).

In order to do justice to the complexity of the described theory change from a narrow to a broad interface between language and society, I shall examine it from different angles. The main body of this thesis comprises three papers, two of which have already been published (Woschitz, 2019; Woschitz & Yağlı, 2019), one of which is currently under review (Woschitz, under review). Given that I chose to do my PhD by publication, the reader might observe certain redundancies between these papers. I decided to leave them in for reasons of time management and faithfulness to the original and hope that the reader will forgive me for that.

In Woschitz and Yağlı (2019), my colleague and I provide a case study of lexical meaning change in the course of the run-up to the Turkish constitutional referendum 2017. We argue that language change, in whichever form, cannot be separated from the sociocultural surroundings in which it takes place. As such, it is very third-wave in nature, and we heavily draw on Silverstein's (1976, 2003) theory of indexicality and

indexical orders in our analysis, as do sociolinguists interested in phonological change. Woschitz (2019) surveys how Labov himself has quarrelled with his own theoretical notion of a 'narrow interface between language and society', and how, in an œuvre that spans 50 years, he has adjusted his theoretical framework to rise to the challenge. As already mentioned, part of the described reorientations have been initiated by the third wave, with Eckert (2012) leading the way, but epistemological tensions in Labov's treatment of language and society have been present from the start. Third-wave variationism, in turn, is still sorting out the consequences of the radical reorientations it proposes.

Woschitz (under review) zooms out for the big picture. In this paper, I draw a parallel between the history of Labovian sociolinguistics and Chomskyan syntax. Even though these two linguistic subdisciplines are rather different in nature, I argue that their theoretical reorientations over the past 60 years share certain philosophical similarities. Here, I turn to the philosophy of science, particularly to the scientific realism debate, to assess whether one can identify in their developments a common philosophical denominator that warrants talking about scientific progress in the broad sense. I argue that linguists turning away from Universal Grammar (UG) and internal factors in their explanations of language-related phenomena is indicative of a broader trend within linguistics – a reverse trend that problematises linguistic autonomy that was envisaged by linguists in the past 200 years (see Joseph, 2002, chapter 3).

The fifth chapter aims to synthesise the three papers into a coherent whole. Here, I revisit Weinreich, Labov and Herzog's (1968) *Empirical Foundations for a Theory of Language Change*, which, down to the present day, still often sets the research agenda of mainstream variationist sociolinguistics. Step by step, I discuss how the emerging popularity of the notions of style and register, either described or alluded to in the previous papers, can shed new light on Weinreich et al.'s famous 'problems' of language change (the actuation problem, embedding problem, etc.). Where Labov once attempted to clearly assign these problems to either language 'internal' and 'external' domains, contemporary enregisterement studies collapse internal and external factors into a messy whole. Internal factors, if acknowledged at all, are

restricted to synchronic constraints of language behaviour, possibly at the level of UG, while external factors assume primacy in explaining why and how languages change. Here, the ontological breach from the orthodox variationist framework comes to the fore as clear as day.

My personal epiphany during this PhD was that academics are, first of all, people. Very smart people indeed, but ultimately people with opinions, personal histories, arrogance or insecurities that cannot be separated from their work. Eckert (2018) quite openly talks about her impostor syndrome even though she is professor of linguistics at Stanford, which ranked 8th for linguistics worldwide in this year's QS University Rankings.[1] Her 2018 book, which is the first book-length manifesto of third-wave variationism to date, reads more like an autobiography – Eckert herself calls it an 'intellectual memoir' – rather than an historically or philosophically accurate depiction of how variationist sociolinguistics has actually developed. She tells the story of a female scholar finding her voice in an academic culture dominated by white men who shied away the minute she began introducing ethnography and gender theory into her theorising.

She closes her book on a personal note:

> Writing this "intellectual memoir" has often been an awkward exercise. At times I've thought I was being unbelievably arrogant, at other times I've thought I was just embarrassing myself. But, like the rest of my life, I've just done it and I'll live with the consequences. (Eckert, 2018, p. 193)

Unbelievable arrogance, embarrassment, having to live with the consequences – these are all intimate and private emotions that I had not expected to see when I began my PhD. I therefore hasten to say that the critique offered in the following pages is not meant to be an attack on individuals. If anyone has to 'live with the consequences', it is sociolinguistics as an academic discipline. But the crucial thing is that I conceive of sociolinguistics as the theoretical status quo abstracted away from the scientific community in which it is practiced. More often than not, to anticipate the discussion

[1] https://www.topuniversities.com/university-rankings/university-subject-rankings/2019/linguistics, last accessed on 22 April 2019.

of Kuhn (1970 [1962]) in chapter 4, problem areas in the work of individual scholars are not due to personal shortcomings (both Eckert and Labov are exceptional scholars with great attention to detail) but due to paradigm-constraints that transcend the individual. It is these paradigm-constraints I aim to capture when I talk about theory change, not necessarily how individuals have changed looking at things. When I place special emphasis on Labov, Eckert or Chomsky, I only do so because their theories have had a massive impact on how academia in general theorises on their respective phenomena, and because it is they who have pushed the paradigms to their limits. This should be always borne in mind when reading the critique offered.

Adopting such a philosophical perspective comes with the price of idealisation. When, in the following pages, I set out to identify theoretical developments in sociolinguistic thought, one first needs to define what given thought – i.e., given paradigm – actually looks like at certain points in history. That is, one first needs to abstract, at different points in history, from a vivid scientific community relatively static sets of convictions and beliefs that all members of given community allegedly share. Then, these sets can be compared, conclusions can be drawn, inconsistencies can be made explicit, and so on. In rare cases, this can be a rather straight-forward process. Chomsky (2006), for instance, wrote a philosophical treatise of his own theoretical framework (*Language and Mind*), in which he, at least implicitly, acknowledges how he changed his ways of thinking over the years (from phrase-structure rules in *Syntactic Structures*, to principles and parameters in *Lectures on Government and Binding*, to biolinguistics in the *Minimalist Program*; see chapter 4.3), and what this means for his theory of UG. Labov never did that. In this case, one needs to reconstruct theory-stages at different points in time before one can begin to discuss any theory changes at all. This is an ambitious project for a PhD thesis, given that his œuvre covers more than 50 years. To this end, I had to restrict my analysis to milestone publications, such as *Principles of Linguistic Change* (1994, 2001, 2010), and to relevant journal articles and conference proceedings; in short, to all those publications that are often cited and that have had a massive impact on the linguistic scholarship in question.

I shall treat books or papers as definitive portrayals of the convictions and intellectual beliefs of the authors at the time they wrote them. This is a process of idealisation again, but it is again a price to be paid. For instance, when Labov (2001) extrapolates from his work on the Philadelphian speech community the nonconformity principle (see chapter 3), I, as a reader, will assume that he wants to convince me that this principle is a general driving force underlying language change – it is framed like this, and it would certainly fit the narrative outlined in the first part of the trilogy (Labov, 1994). Otherwise, he could have just called his book, say, *Linguistic Change in Philadelphia*, and not *Principles of Linguistic Change*. Granted, the title of the book series could have simply been the editor's choice, because publishing books with sensationalist titles will sell better than quasi-ethnographic work on a single city. But when linguistics students pick up the book from the library to study for their exams, they will not necessarily know that, and they will justifiably expect broad generalisations of language change from a book that says *Principle of Linguistic Change* on the cover.

When, later in the same book series, Labov (2010) downgrades the nonconformity principle to one possible driving force among many, he considerably weakens the claims he had made 9 years before without explicitly acknowledging it. This is a first point of reference to trace a theoretical reorientation in Labov's œuvre (more on which can be found in chapter 3). From there, one can pick up the threads and trace even more recent developments down to the present day, which I have aimed to capture in the fifth chapter of this thesis.

The same kind of reasoning runs through this entire thesis, except for chapter 2, which is a comparatively straight-forward empirical paper. In the rest of the thesis, secondary literature was consulted where available (especially in the discussion of Chomsky in chapter 4), but the lion's share involved extensive critical reading on my part, synthesising the continuities and discontinuities I found into a coherent story, and measuring my story against other, more prominent accounts of how sociolinguistics has progressed over the years. Where my own evaluations do not match these, such as the wave-model proposed by Eckert, I have tried to make the sources of disagreement

as explicit as possible by drawing on the philosophy of science and metatheoretically-leaned linguistic literature. This, I hope, will be the original contribution of this PhD thesis to linguistic scholarship, and I hope to have found with this methodology a sensible middle course that allows me to remain faithful to the authors while being able to highlight important theory changes at the same time.

On a personal note, when I engage in intellectual discussions – and what is a PhD thesis if not a whole-hearted discussion –, I do so because I find them, first of all, stimulating. Of course, writing a PhD thesis means that I will have to challenge certain ways of thinking, and this necessitates criticising the people championing them, but I always have the bigger picture in mind. I want to advocate a discussion culture where, even after the harshest discussions, one can sit together over drinks and laugh over it. In this spirit, I want to invite the reader to set aside their presuppositions, to step back and (re-)evaluate, with a cool head, the theoretical underpinnings of their own work; to think with me, for a while, about the bigger picture, namely how we have implicitly or explicitly conceived of language and society in general, how this conception might challenge or even contradict competing views, and where this conflict will take us in our understanding of human affairs and what linguists like to call ‘language’.

CHAPTER 2: THE MEANING CHANGE OF *HAYIR* DURING THE TURKISH CONSTITUTIONAL REFERENDUM 2017[2]

This paper aims for a systematic analysis of the lexical meaning change of *hayır* in the course of the run-up to the Turkish constitutional referendum on 16 April 2017.

Hayır is an Arabic loanword that was borrowed into Turkish between the 8th and 10th centuries in the context of Turkic tribes converting to Islam. What makes the word unique is that it means both 'good' and 'no', and both meanings are used in everyday Turkish, e.g., *Hayır haberdir inşallah* (Hope this is good news) and *Yorgun musunuz?* (Are you tired?) - *Hayır* (No) (Dictionary of Turkish Language Association (TLA), 1998, p. 967).[3] On top of that, both meanings have acquired different indexical meanings over the last millennium. *Hayır* 'good' has predominantly acquired religious indexical meaning, which has to do with the fact that the Quran employs it in this meaning. In the course of the Neo-Ottoman endeavours of the AKP under Recep Tayyip Erdoğan (see chapter 2.3.3), it acquired additional politicised indexical meaning. *Hayır* 'no', on the other hand, has not acquired similar meaning extensions: in the past, attempts from political stakeholders to attribute indexical meaning to it were unsuccessful (see chapter 2.3.4). This, however, changed in the course of the run-up to the Turkish constitutional referendum in 2017. There, people had to choose between increasing the power of Erdoğan by voting *evet* (yes), thus fuelling his Neo-Ottoman ambitions, or to preserve the Kemalist laicist nation by voting *hayır* (no). This led to an odd situation where a pro-democratic vote and a diametrically opposed Neo-Ottoman ideology were expressed with the same word *hayır*. No-voters soon began to take up this homonymy to contest the regime. By placing the Neo-Ottoman

[2] The following chapter appeared in print as Woschitz, J., & Yağlı, E. (2019). The meaning change of *hayır* during the Turkish constitutional referendum 2017. *Language Sciences, 72*, 116-133.
[3] The TLA defines these two expression units as one lemma.

indexical meaning of 'good' into a dialogue with the second referential meaning 'no', they managed to create a new meaning that directly opposes Neo-Ottomanism.

To explain such meaning changes, scholars have often focused on the specific interests of the parties who pushed the change (e.g. Hill, 2008; Wong, 2005). For instance, it could be argued that what happened with *hayır* in the context of the 2017 referendum could be best explained as an example of one party claiming someone else's resources to achieve a political goal. Claiming the word *hayır* from their political opponent means to fight fire with fire. Such an approach would fall under the broad framework of cultural appropriation (see chapter 2.2), which places special emphasis on the agency of the involved individuals or collectives.

In this paper, we want to emphasise that given agency of individuals or collectives can only be interpreted holistically if we analyse the sociolinguistic surroundings in which it is embedded. These include the driving forces of the individuals or collectives pushing forward the change. But the complex indexical history of the targeted word/phrase/item, itself the result of sociolinguistic meaning-making that extends beyond the utterance *in situ*, seems to be equally important. While it is true that the motivation of the claiming party can initiate meaning change, we argue that the trajectory of the change is often set by its indexical history. Whether people achieve a lexical meaning change depends not only on their own motivation and the socio-political surroundings but also on the indexical complexity of the word itself.

To develop this argument, we are going to lay out Silverstein's (1976, 2003) theory of indexicality and indexical orders. We shall then discuss how agents can create new indexical meaning through stance (Jaffe, 2009b) and voice (Agha, 2005). We claim that stance as a means of engaging with indexical resources allows us to add a temporal logic to a concept that could otherwise be wrongly read as a mere synchronic concept of indexical meaning. Silverstein's concept of indexicality allows for a temporal dimension from the very start; indeed it seeks to reconcile the diachrony/synchrony distinction (Silverstein, 2003, p. 203, see chapter 2.1). Applied to the study of meaning change, this means that in order to grasp the whole picture, the indexicality of a word

needs to be understood as the product of various meaning changes at various points in time. This can help us understand that the synchronic state of coexistent indexical meanings can be theoretically reinterpreted in a temporal logic.

Our analysis of *hayır* makes a strong case for this assertion, because it traces how speakers have attributed new indexical meanings to *hayır* over the past millennium, but all these different indexical meanings are synchronically available for speakers of the 21st century. In our data analysis, we posit three distinct indexical orders of *hayır* that all played an important role in the meaning-making process in the course of the 2017 referendum. This enables us to show that the indexical past of *hayır* is deeply implicated in the meaning change. It also enables us to show that the new meaning is the result of an indexical dialogue *within the word itself* which is made possible by the extraordinary situation of *hayır* meaning 'good' and 'no', two meanings that are distantly semantically related and, what is more, carry different indexical values.

Our analysis will also show that people attempted in the past to change *hayır* in a similar manner but failed to do so. In a second line of argument, we discuss in detail the circumstances that affect whether an attempted appropriation is successful. We draw on Bakhtin's (1981 [1934-35]) heteroglossia and Ducrot's (1984) theory of polyphony, and we align their theorising with Voloshinov (1986 [1929]) and the idea of fractal recursivity (Irvine & Gal, 2000). We claim that different levels of political division in a society might affect whether the meaning change is carried through. This will be discussed in detail in chapter 2.3.4, where we show how the referendum drove a wedge between two parts of the society: one holds either the Kemalist or the Neo-Ottoman belief.

In summary, our paper will deliver two messages. First, we aim to convince the reader that when it comes to lexical meaning change, in the context of appropriation, the indexical complexity of the word plays an important role in deciding on which direction the change is going. In this line of argument, we elaborate on similar-spirited work (e.g. Beaton & Washington, 2015; Hill, 2008; Schwartz, 2008; Wong, 2005, 2008) where indexicality, whether in a Silversteinian or in a more general Peircean

understanding of the term, sheds important light on the mechanics of the meaning change. Second, whether the meaning change is successful depends on the severity of the situation. Just as ideology is always immanent in the indexical past of a word, it is also present in the struggle over who has control of a symbolic resource. We therefore distinguish between two important sides in lexical appropriation: the trajectory of the change, which we argue is set by its indexical past, and the amount of thrust behind it, which is set by the socio-political surroundings of the meaning-making process.

2.1. Indexicality, indexical orders and stance

The theory of indexicality was first introduced by Silverstein (1976). In his paper, he aims at doing away with the reference/performance distinction in the study of language by claiming that reference itself is a performative act among others. To develop this argument, he elaborates on Roman Jakobson's (e.g. 1971) work on shifters. Shifters are linguistic features like deictic terms where 'the reference "shifts" regularly, depending on the factors of the speech situation' (Silverstein, 1976, p. 24). Silverstein extends this notion with the help of Peircian semiotics (Peirce, 1932 [c. 1897-1910], 1932 [c. 1897]) by claiming that all signs, not just shifters, inherently have shifting qualities. In this logic, a sign does not necessarily have one single symbolic, indexical or iconic meaning. Instead, specific meanings are activated contextually in performative action (Silverstein, 1976, pp. 18-19). For instance, to give an example from sociolinguistics, the sign vehicle pre-consonantal and word-final (r) in Labov's (2006 [1966]) NYC study might signify 'higher class' in the context of New York City, but in regions where non-rhotic accents are prestigious, it would actually carry the opposite meaning. These indexical meanings do not necessarily add or change the original referential meaning. The sign vehicle *car* still denotes a transport vehicle, regardless of the social meanings communicated by a rhotic pronunciation, so it carries symbolic-denotational and indexical-non-referential meaning simultaneously. The classical reference/performance dichotomy, Silverstein argues, cannot account for how a sign vehicle can acquire such multi-faceted meanings. Hence, Silverstein postulates that 'the property of sign vehicle [*sic*] signaling contextual "existence" of an entity, is itself a sign mode independent of the other two' (Silverstein, 1976, p. 25). This property he calls indexicality.

In a later essay, Silverstein (2003) introduces the prominent notion of indexical orders, where indexical signs can build on each other to create new related meaning. This process is formalised in ordinal degrees, ranging from 1st-order, 2nd-order to nth-order indexicalities.[4] A 1st-order indexicality is what can be taken as a linguistic phenomenon that indexes certain characteristics, but without invoking any social judgment. Take as an example the High Rising Terminal (HRT), i.e. rising intonation at the end of a sentence, a full treatment of which can be found in e.g. Levon (2016).[5] At a 1st-order level, people would be able to point to speakers who use HRT, and although they might become aware of the fact that the feature is unequally distributed among men and women (if it is indeed true that women use it more than men do), this awareness does not leave the descriptive stage. This can change if people decide at some point to extrapolate a characteristic from their empirical observation, in which case the 1st-order indexicality is brought into 2nd-order play. For instance, by relating HRT to feminine speech in general, people can begin to perceive rising intonation at the end of a sentence as a gender-specific trait (this example is taken from Jaffe, 2016, p. 94). This perception could, for instance, be grounded in the ideology that rising intonation connotes hesitancy, and that women are less self-confident than men. Silverstein (2003, p. 194) argues that such an ideologically/culturally driven construal of an nth-order indexicality is always immanent in the semiotic performance of speakers. This sort of 'ethno-metapragmatic' (ibid.) construal can then be the starting point of another association, for instance a restriction to the belief that HRT is only used by 'ditzy' California Valley Girls (see e.g. Tyler, 2015), reaching the point of an n+1th indexical order.[6]

Sociolinguistics has accounted for the question what instantiates indexical change (e.g. from nth-order to n+1th-order) by focusing on the agency of speakers, particularly in the theory of stance (see Jaffe, 2009b). According to the theory of stance, speakers

[4] Nth-order indexicality is often used as a stand-in for any indexical order and is not meant to be the 'final' indexical order.
[5] The discussion of HRT is oversimplified here for illustrative purposes. Reporting on the interactional depth of HRT is beyond the scope of this paper.
[6] This has become a trope in popular culture, see e.g. https://www.youtube.com/watch?v=Tj4EIGje4dA, last accessed on 12 September 2017. On a technical note, Silverstein (2003) erroneously uses 'n+1st' to denote ordinals which mathematicians would call 'n+1th'. I will adhere to the latter, correct convention.

can, as a means of self-presentation, create new indexical meaning by drawing on pre-existing indexical resources that are available to them (Jaffe, 2009a; this is related to what Levi-Strauss, 1962 calls 'bricolage'). This can give rise to new, possibly competing or nested, indexical meanings (e.g. HRT as a marker for women vs. HRT as an index for California Valley Girls), constituting what Eckert (2008) terms an indexical field. For instance, if a gay male speaker uses HRT despite or because of its nth-order indexicality of being a feminine trait, he could thereby create a new n+1th-order indexicality whereby a gay man might use HRT on the grounds of the public conception that feminine-sounding men do not comply with heteronormative masculinity. Other gay men with the desire to openly show their sexuality could take up the new n+1th indexicality as an act of stance-taking, to voice, for example, that they are not afraid to index their sexual orientation in public discourse. Thus, for someone to take a stance is a circular rather than a unidirectional process, as speakers not only draw on pre-existing indexical resources but also contribute to them (Jaffe, 2009a, p. 15). This, in turn, can lead to the situation where even those speakers who have not engaged in a meaning change personally still have to adapt to the new indexical meanings that result from the agentive behaviour of others.[7] Indexical orders, then, do not suggest a strict temporality, as if an n+1th-order indexicality had to be a chronological successor of a previous nth-order indexicality (Eckert, 2008, p. 464; Silverstein, 2003, pp. 195-196). Rather, they constitute a state of reciprocity because nth-order and n+1th-order indexicalities mutually define and instantiate each other. Likewise, indexical fields are both the result of and the basis for agentive behaviour.

Stance-taking is often ritualised, that is speakers often systematically draw on indexical resources to voice stereotypical characterological figures/personae or 'entextualized figures of personhood' (Agha, 2005, p. 43). The concept of voice goes back to Bakhtin (1981 [1934-35]), who in his literary analysis was concerned with how characters in Dostoyevsky's prose communicate on several layers. Applied to linguistics, a similar process is mirrored in the indexical performance of speakers. For instance, in the American Indian language Lakota, there is grammaticalised male and female speech, in the form of different enclitics to be used by men and women. In the

[7] We would like to express our gratitude to an anonymous reviewer for pointing this out to us.

Lakota tribes, as in most cultures, the upbringing of a child was traditionally female business. Men are nonetheless affectionate with children, and have been recorded using female-speech (Agha, 2005, p. 48). Men thus temporally acquire the persona of a caregiver (3rd-order indexicality) that normally is not theirs through tropic use of grammatically gendered linguistic registers (1st-order indexicality), thereby invoking the 2nd-order meaning of motherliness (ibid.). Similar examples include professionals in Beijing using full-tone variants and less local features (1st-order indexicalities) to voice a yuppie-persona (2nd-order indexicality; Zhang, 2005); or the (non-)usage of retroflex /t/ in British Asian English (1st-order indexicality) to voice in-group affiliations (2nd-order indexicality; Sharma, 2011). Podesva (2007) has also shown how one gay man, over multiple speaking contexts, uses falsetto (1st-order indexicality) to voice the persona of what Podesva calls a 'flamboyant diva' (2nd-order indexicality) to express his homosexual identity (3rd-order indexicality).

The recognition of such personae, utilising indexical resources that sometimes encompass many indexical orders, stands and falls with the awareness of semiotic processes, i.e. the indexical field subsuming all relevant indexical orders underlying the meaning-making process (Agha, 2005, p. 43). Each indexical field might provide speakers with different resources for entextualised meaning, and the possible personhoods that can be voiced by stance-taking are highly context-specific.

2.2. Lexical meaning change and cultural appropriation

Even though indexical analyses are not restricted to grammatical features, lexical items have not received much attention in indexicality research (Beaton & Washington, 2015, p. 13). Rather, related lexical meaning change has traditionally been studied by critical theorists in the framework of cultural appropriation. Cultural appropriation is broadly defined as 'the taking – from a culture that is not one's own – of intellectual property, cultural expressions or artifacts, history and ways of knowledge' (Ziff & Rao, 1997, p. 1). Such an analysis is concerned with how agents contribute to the perpetuation of power imbalances (ibid., pp. 8-9). Appropriation is often seen as a kind of theft that goes hand in hand with degradation of a marginalised group (e.g. Hill, 2008, pp. 158-159).

Hill (2008) cites white racism in the United States as an example. White speakers, on a regular basis, appropriate words and phrases from African American English which originally carried negative connotations and bring them into 2nd-order play (this is not the term Hill uses) in order to make it a desirable quality (ibid., pp. 166-170). Such is, for example, the case with slang phrases like *I'd hit that* or words like *gangsta*, which white speakers have adopted as an index of hypermasculinity (ibid., p. 168). Such a 2nd-order usage by the claiming party is only warranted by, and reinforces, the stigmatised 1st-order index that is normally attributed to African American people. In this case, hypermasculinity reinforces the belief that black men are aggressive and dangerous.

A similar mechanism is at work when white speakers appropriate Spanish in mock-speech. For instance, words like *macho* or *adios*, originally carrying the neutral meanings *male* and *goodbye* in Spanish, are used in mock-speech respectively to denote a hyperaggressive male stereotype and to express *goodbye and good riddance* (ibid., pp. 135-136). Another example is the phrase *hasta la vista, baby* (broadly translated as *until we meet again, baby*); made famous by Arnold Schwarzenegger in the movie *Terminator II: Judgment Day*. After saying what is now among Schwarzenegger's catchphrases, his character shoots his opponent. Getting this joke, Hill argues, 'requires access to a negative stereotype of Spanish speakers as treacherous and insincere, the kind of people who would tell you politely "Until we meet again" and in the next instant blow you away' (ibid., p. 120). Similar to the appropriation of African American English, then, mock-speech covertly places white speakers over the marginalised Spanish-speaking community. This marginalisation process has gone so far that white speakers even have claimed the Spanish word *gringo* for themselves, even though it is a term that pejoratively pictures whites as 'characteristically racist individuals' (Schwartz, 2008, p. 229). Following the logic "Look at those criminal/untrustworthy/poor/etc. Hispanics. Who would want to be like them?", white speakers feel confirmed in their hierarchical thinking and take pride in their inability to speak Spanish (ibid., pp. 229-230).

Similar marginalisations outside the US have been reported by Wong (2005, 2008) in his analysis of the appropriation of *tongzhi* by gay-right activists in Hong Kong. *Tongzhi* originated about 2200 years ago in the Qin Dynasty to refer to 'people with the same ethics and ideals' (Wong, 2008, p. 428). Even though nowadays the term has predominantly communist connotations, LGBT-communities have claimed it in its first-order meaning of likeminded revolutionaries in their fight for equal rights (see Wong, 2005). 'Through the use of *tongzhi*, activists exploit the revolutionary connotations of the term and its suggestions of solidarity, intimacy and striving for liberty. Like Chinese revolutionaries, activists use the term to present a public, collective and political front' (Wong, 2008, p. 441). This movement has been contested by local newspapers, whose authors aim to uphold a heteronormative worldview by exclusively using *tongzhi* in their articles to denote homosexuals in illegal or other dubious behaviour (Wong, 2005). This is a kind of hostile reappropriation with the only aim to criminalise the LGBT-community, in contrast to the appropriation rooted in emancipatory efforts of a minority.

Beaton and Washington (2015) point out that appropriation is not necessarily a black and white process that concerns either the oppressor or the oppressed. They show that primarily uninvolved people can likewise appropriate words, for instance to defend the community under threat. *Favelado*, a derogatory term for *slum-dweller* in Brazilian Portuguese, for instance,

> is retaken by fans of the Rio de Janeiro Flamengo soccer team as a term of in-group solidarity, even though the fans themselves are not necessarily from the favela […] By making the connection between themselves, the players, and the slur, they foster an in-group identity alongside slum-dwellers. [...] the fans reclaim the insult that is used against them, temporarily assuming an identity that may not authentically be theirs (ibid., pp. 15, 18).

By aligning themselves with the soccer team, the fans achieve to repackage parts of the derogatory n+1th indexical meanings attributed to *favelado* ($e.g.\ dishonest \rightarrow street\ smart,\ violent \rightarrow badass$). Such an analysis sheds important light on the micro-processes that are at work in the fight over symbolic resources, because the interactional context (in this case, the soccer game) seems to decide which parts of the indexical field can be altered (ibid., p. 16).

In summary, all of the above studies refer to indexicality in the context of power imbalances in one way or another. Hill (2008, pp. 143-157), for example, locates white racism in nonreferential indexicality (Silverstein, 1976, pp. 30-33). She argues that mock-speech deliberately or non-deliberately performs social distinction. This allows us to account for why people sometimes do not consider themselves racist while engaging in racist behaviour at the same time. Beaton and Washington (2015) are concerned with the complexity of appropriation that is brought into play by indexical fields. Wong (2008, p. 423) only implicitly deals with indexicality and indexical orders by acknowledging that 'the speakers' agency involved is both enabled and constrained by the discursive history of the term and larger socio-historical processes'.

All of the above authors show that much like phonetic or suprasegmental differences, lexical items can be appropriated as symbolic resources to construct shared identity. This process is mediated by the historical past of the term, and speakers knowingly draw on present and past connotations. Overall, this is congruent with the indexical approach outlined in chapter 2.1, where we have already seen that semiotic processes, i.e. indexical fields along with its indexical orders, are among the main factors that decide on how a feature is interpreted. The unique advantage of applying Silverstein's framework is that ultimately, the different kinds of meaning-making outlined above (e.g. Hill's analysis of performing whiteness or Wong's analysis of LGBT-activism) can be accounted for by the same underlying semiotic mechanisms of indexicality, indexical orders and stance. This enables researchers to extrapolate from case studies a broader theory of meaning-making. Nothing stops us, then, from applying the same theoretical tools in the analysis of lexical items. Our analysis of *hayır* will show that doing so indeed bears fruit.

2.3. Data analysis

On 16 April 2017, a referendum proposing 18 amendments to the constitution was held in Turkey, effectively aiming to change the constitutional status from a representative system to a presidential one. It was initiated by the Justice and

Development Party (AKP)[8] and the Nationalist Movement Party (MHP), the two leading promoters of 'evet/yes' that were represented in the parliament during the referendum. The official argument behind the referendum was the necessity of changes in the administrative system which should bring an end to the shortcomings of unstable coalition governments formed previously in the current parliamentary system. The leading opposition siding with 'hayır/no' were the Republican People's Party (CHP) and the People's Democratic Party (HDP). They criticised that providing the president with too much power would break and exploit the separation of powers which has been guaranteed by the constitution. After a vote-counting that was criticised as disputable (e.g. Bilgin & Erdoğan, 2018; Çalışkan, 2018), the referendum resulted in a 51-49% lead for the yes-side, and the proposed 18 amendments are going to be enacted incrementally until 2019.

Before we describe the indexical meaning-making process of *hayır* during the referendum, we are going to outline how its meaning has changed in the past to arrive at its current meaning. As noted in the preceding chapter, it is important to take these semiotic processes into account when investigating meaning-change. As it turns out, people in the context of the 2017 referendum have been well aware of the historical past of the term, which can be simply but validly expressed in 4 traceable indexical orders.

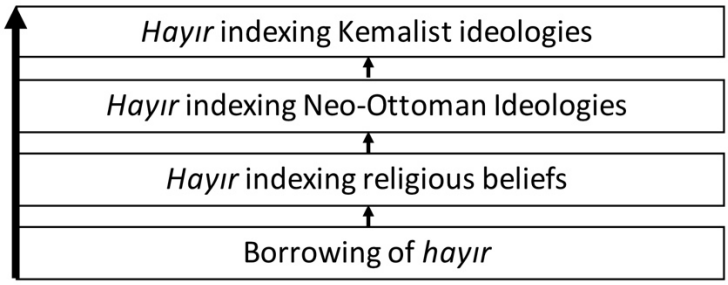

Figure 1: The four indexical orders of *hayır*

[8]AKP is an initialism for Turkish Adalet ve Kalkınma Partisi, which is called AK Parti by party members.

The first indexical order describes the borrowing of *hayır* from Arabic into Turkish between the 8th and 10th century. The second order describes how *hayır* became restricted to religious contexts at the time of the Ottoman Empire. The third order shows how *hayır* has been politicised by the AKP to propagate their Neo-Ottoman ideology. The fourth level encompasses the employment of the word by the democratic grassroots movement in the course of the constitutional referendum on 16 April 2017. That is, it indexes Kemalist ideologies that directly oppose Neo-Ottoman ideologies.
For the analysis of the first order, we present evidence from etymological resources. In the analysis of the second and the third orders, we remain diachronic and additionally provide evidence from an online hypertext dictionary called *Ekşi Sözlük* (literally, "sour dictionary"), a collaborative platform for users with diverse political ideologies which has one of the highest visiting rates in Turkey.[9] The transition between the third and the fourth indexical orders is the most visible part of the current indexical meaning-making process. Hence, in the fourth order, we present diachronic evidence in the discourses of the no-side, yes-side and newspapers during the referendum process. We focus on how *hayır* has acquired new indexical meaning in the course of the period that covers the four months leading up to the Turkish constitutional referendum held on 16 April 2017.

2.3.1. The first order: Borrowing

Since the conversion of Turkic tribes to Islam between the 8th and 10th century, there has been close contact between Turkish and Arabic cultures in social and religious practices. Turkish has borrowed several words from Arabic in the course of this, among others the word *hayır* [hajɯr].

In the source language Arabic, the root (k-y-r) can be employed in two semantic environments; namely (i) 'choice' or 'selection' (i.e. *k̲āra* as a verb) and (ii) 'good' (i.e. *xayr* as a noun) (Wehr, 1979, p. 308). Turkish adapted the word as (i) a particle that means 'disapprove' and 'no'[10] and (ii) as a noun that means 'goodness', 'favour' and 'an act charitably with no thoughts of personal gain', and as an adjective that

[9] As for May 2017, *Ekşi Sözlük* is ranked 14th in Turkey and 654th in global by Alexa traffic rank, alexa.com, last accessed on 21 June 2019.
[10] Notice that Turkish did *not* borrow the Arabic word *la* (no) in this process.

means ‘good’, ‘beneficent’ (TLA Dictionary, 1998, p. 967).[11] The oldest written source in Turkish that mentions the word *hayır* in the meaning of ‘good’ is the 11th century work *Kutadgu Bilig* (wisdom which brings good fortune), which, in its poetic style, follows Arabic prosody. It is also the first written source given after Turkic people became Muslim.

Modern Turkish also uses the Turkic equivalent *iyi* for ‘good’*,* and both *hayırlı* and *iyi* are used in everyday conversation, e.g. ‘İyi/hayırlı günler’ (Have a good day). *Hayır* for ‘no’, on the other hand, replaced the Old Turkic equivalent *yok* [jɒk] which partly grammaticalised in the process, for instance to an attributive adjective as in ‘Hiç paramız yok’ (We have no money). This replacement has most likely taken place for politeness reasons. *Meninski Thesaurus*, which dates back to 1680, for instance, mentions that the word *hayır* was started to be used in diplomatic language to refuse someone in a polite manner as “I say no with good reasons”.[12] Remnants of its original usage, however, can still be found in everyday conversation, for instance in *Geldiler mi?* (Did they come?), *Yok, daha gelmediler* (No, they have not yet.) (TLA Dictionary, 1998, p. 2456), where it is used synonymously with *hayır*.

2.3.2. The second order: *Hayır* as a religious practice

The intersection point in the semantic content of *hayır* in Arabic and Turkish resides in the meanings ‘good’ and ‘goodness’, which can be traced through shared idiomatic expressions and proverbs. It is also the meaning that is used in the Quran, which has played a significant role in Middle Eastern everyday life. For instance, the Ottoman Empire (1299-1922), at its peak point between the 15th and 16th centuries (İnalcık, 1998), endorsed an entirely Muslim lifestyle (e.g. Barkey, 2005; Mardin, 1994, pp. 113-128; Sezer, 1981, p. 9). Although this has changed with the foundation of the

[11] Turkish has another loanword from the same Arabic root for ‘choice’, which is *karar* (decision, judgment). In addition, there is another word *ghayr* in Arabic which was also borrowed by Turkish, but which seems to be unrelated to *hayır*. The word *ghayr* forms a minimal pair with *xayr* and denotes the meaning “other than”, e.g., *ghyr rasmiin* (Arabic), *gayriresmi* (Turkish), *unofficial* (English).

[12] It is not clear, at this point, whether this is achieved by combining both first-order meanings, i.e. ‘no’ and ‘good’, or by religious connotations, which would then technically fall under the 2nd order. Our correspondences with Turkish etymologists and historians did not help to resolve this issue. Thus, the oldest available source to consult is Meninski Thesaurus. Given that it was first published during the Ottoman Empire, both interpretations are warranted.

Republic of Turkey in 1923, Islam has continued to play an important part in the lives of the Turkish people. In line with this, Turkish *hayır* in its (ii) first-order meaning became restricted to religious environments, constituting a second indexical order that combines goodness with a sense of divinity. For instance, in the dictionary of the TLA, the word *hayır* 'good' is exemplified with the sentences *Hayır haberdir inşallah!* (Hope this is good news, lit. trans. "Good news is God willing") and *Dualarında hep hayırlı, dindar bir evlat isterdi* (In his prayers, he used to ask for a beneficent and religious child, lit. trans. "In his prayers, all he asked is a beneficent and religious child"). In both examples, *hayır* is used in a religious phrase, either to denote that something is desirable (along with the Arabic loanword *inşallah*) or in religious storytelling respectively (TLA Dictionary, 1998 p. 968).

The Turkic counterpart *iyi*, on the other hand, remained neutral. For instance, a web search for the proverb in (1) below yields clearly religious results when *hayır* is used. When *iyi* is used, search results do not yield any polarity, because the proverb itself has been employed and institutionalised in widely circulated coursebooks, newspapers, broadcasts, etc.

(1) İyilik / Hayır yap denize at, balık bilmezse Hâlik bilir.

Lit. trans. Do something good and throw it to the sea, no one knows but God.

"Cast one's bread upon the waters."

People are thus well aware of the religious indexicality. Further evidence for this can be given from a thread on *hayırlı*[13] in the collaborative hypertext dictionary *Ekşi Sözlük*. In *Ekşi Sözlük*, users have been describing words, events and people from their

[13] The derivational suffix *-lI* in Turkish forms nouns, adjectives and adjective phrases (Göksel & Kerslake, 2005, p. 60f).

- From nouns and adjectives, it derives words that possess an entity, e.g. *akıl-lı* (clever), *hayır-lı* (good), *sevgi-li* (lover),
- From nouns of place and locative pronouns, it indicates where a person belongs, or comes from, e.g. *Avusturya-lı* (Austrian), *Londra-lı* (Londoner), *köy-lü* (villager),
- From numerals, it denotes groups made of numbers, e.g. *üç-lü* (trio), *altı-lı* (sextet),
- From noun phrases, it derives adjectival phrases that possess an aspect or entity, e.g. *dört çocuk-lu* (with four children), *deniz manzara-lı* (with a sea view), *mavi elbise-li* (in blue dress).

own perspectives since it was founded in 1999. The following extract (2) involves 4 out of 12 entries on *hayırlı*:[14]

(2)

Thread: 'Hayırlı'– *Good*	
Turkish	English
(a) October 10, 2000 *Yararlı, yarayışlı, kut'lu, iyi-güzel manasında bir söz kendisi.*	 It is an utterance which means beneficial, useful, blessed, good-beautiful.
(b) November 29, 2001 *Nedendir bilinmez ama genellikle dindar kesimin kullandığı sıfat.*	 It is an adjective which is somehow usually used by the religious section of the society.
(c) April 18, 2010 *Dincilerin pek sevdiği ifade. Az önce TRT Haber'de bir ilahiyat profesörü kutlu doğum haftası çerçevesinde "peygamber efendimiz"i anlattıktan sonra süresi dolunca ("Allahtan" her şeyin bir sonu var), "**hayırlı** yayınlar" demiştir. [...]*	 It is an utterance which is liked by religious people. Shortly before, after talking about "our master prophet" considering the holy birth week, a professor of theology on TRT News said "have a [good] broadcast" when his time was up ("Thank God" everything comes to an end). […]
(d) October 30, 2014 *Ben Allah'ın bizi çoktan seçmeli bir hayata karşı tabi tuttuğuna inanıyorum... Hep **hayırlı** bir yol da sunuyor bize... Ama biz bazen hayırsız yollarda ısrarcı oluyoruz... Sonra neden mutsuzum?* *Hep Allahım **hayırlı** yolu görmeme ve seçmeme yardımcı ol diye dua etmek lazım.*	 I believe that God tests us with a multiple choice life exam. Indeed, it provides us with [good] options. However, we sometimes insist on bad ones. And then we ask why we are unhappy. We should always pray to God for seeing and choosing the [good] options.

(2a) describes the word along with its synonyms, among which is the religiously connoted 'blessed'. (2b) shows that is not just a matter of arbitrary word choice by linking *hayır* directly to religious practices. The author of (2c) substantiates this claim with a quotation from a professor of theology in a television programme on state-owned TRT (Turkish Radio and Television Association). In (2d), the writer employs *hayırlı* with 2nd-order meaning in his/her own discourse.

[14] In the extracts provided in this chapter, the words *hayır* and *hayırlı* are given in square brackets [ ] in the English translation and are **bolded** in the source text. Hyperlinks are underlined.

2.3.3. The third order: *Hayır* indexing Neo-Ottoman ideologies

At its peak point, the Ottoman Empire covered around five million square kilometres ranging from the Middle East to Central Europe and Northern Africa, and thus encircled various ethnic and religious practices. After the fall of the Ottoman Empire, and with the foundation of the Republic of Turkey under Atatürk in 1923, the 'Ottoman cultural heritage' had started to be less visible in the public sphere, mainly due to laicist reforms focusing on the separation of social and religious practices in the early years of the republic. However, in the years following the 1980 coup d'état, the Kemalist nation-building period gradually came to end and the ideological motive of Neo-Ottomanism emerged under the rise of the AKP (Yavuz, 2016, p. 439).[15]

Two important figures who paved the way for this ideological motive were Turgut Özal and Süleyman Demirel, who were both prime ministers and presidents of Turkey from 1983-1993 and from 1991-2000 respectively. Both were active agents in renouncing the statism that had been implemented under Atatürk by advocating for economic liberalism. Aiming for a religious and linguistic commonwealth spreading from Turkey to Central Asia (i.e. the Former Soviet republics) to the Balkans through terms which stress 'brotherhood' and 'kinship', Özal legitimised Turkish cultural and economic dominance by helping conservative Muslim entrepreneurs who formed the essence of Turkish economy (Özel Volfová, 2016, p. 493).

Following Özal, Recep Tayyip Erdoğan, the founder of the AKP, introduced Neo-Ottomanism as a new foreign policy for Turkey in his TV address on 25 February 2005. For the AKP, regaining a former political and economic strength is closely linked to the rejection of Atatürk's idea of a secular nation (Onar, 2009, p. 12; Özel Volfová, 2016, pp. 496-497; Taspinar, 2008, p. 14; Türkeş, 2016, p. 199). While Özal's main political aim was to construct a transnational Turkishness via shared ethnicity, Neo-Ottomanism under the AKP seeks to reinvoke an idealised Ottoman

[15] The term "Neo-Ottomanism" was first introduced by Ahmet Davutoğlu, who later became the Minister of Foreign Affairs and the Prime Minister of Turkey, in his column in one of the pro-Islamist daily newspapers *Yeni Şafak* in April 1999. In his article, Davutoğlu stresses the need for neo-liberal thinking in both foreign and domestic affairs, and he argues that returning to Ottoman roots lives up to this need. He then puts this return to conservative and traditional values on a par with the French Revolution and the Congress of Vienna.

past by capitalising on religious uniformity. In order to reconstruct the religious-historical basis of the Ottoman Empire in a neoliberal fashion, the AKP worked together with liberals and left-liberal intelligentsia, among whom there were columnists, TV commentators and bureaucrats (Türkeş, 2016, p. 192). Columnists, for instance, have promoted AKP's policies, and TV commentators have endorsed AKP's discourses and policies, both implicitly and explicitly. In this line, it can be said that liberal elites have become a major tool endorsing the current socio-political motivation by representing Turkey's new policy. With this socio-political impetus, neo-Ottomanism has claimed a variety of public spaces and discourses within a spectrum of architecture, film and television, fashion and even in culinary culture.

Neo-Ottomanism has also resonated with the indexical meaning of *hayır*, linking previous religious indexical meaning to the refusal of Atatürk's secularism and thus to a political ideology. AKP-affiliates have started to use *hayır* to take a political stance, of which ordinary people have become increasingly aware. Erdoğan, for instance, has been reported in several instances to say *hayırlı olsun* (All the best, lit. trans. "be good"), a phrase with heavy religious connotations. This led to the emergence of a third-order indexicality. Similar to the evidence given for the second indexical order (*hayır* as a religious practice), below we present some extracts from the threads in *Ekşi Sözlük* on the use of *hayırlı* in the contexts *hayırlı günler* (have a good day) and *hayırlı işler* (have a good work), where people link this use to the highest political representative of Neo-Ottoman ideology, namely the AKP.[16] The first thread below is on the phrase *hayırlı günler*:

(3)

Thread: 'Hayırlı günler' – *Have a good day!*

Turkish	English
(a) October 20, 2011	
Akpli olmayıp öyle gözükmeye çalışan birtakım memur kesiminin dillerinden düşmeyen söz. *[...]*	It is a phrase used by civil servants/officers who are trying to seem like an AKP supporter while they are not. […]

[16] The AKP has been the sole representative of this ideology in the recent political agenda of Turkey since it was first mentioned.

(b) August 28, 2014	
*İyi günler ne zaman **hayırlı günler** oldu lan hıyarto diye cevap verilmesi gereken laf.*	It is an expression where it needs to be asked why "have a [good – iyi] day" became "have a [good – hayırlı] day".
(bkz: eski köye yeni adet getirmek)	(see: new tricks to old dogs)
(bkz: şekilcilik)	(see: pretentiousness)
(bkz: günlük hayata siyaset sokan piç)	(see: bastard who politicises everyday life)

The author in (3a) puts forward the idea that the word *hayırlı* is used by those who are working for the government (i.e. Civil servants, officers, etc.) aiming to seem like an AKP supporter because they either feel threatened by or want to take advantage of the two polarised ideologies. (3b) raises the question concerning the change in the connotations of the words *iyi* and *hayır*. Following the format of the *Ekşi Sözlük* medium, the second author provides the readers with three hypertexts which stress this shift as an unwelcomed innovation.

2.3.4. The fourth order: *Hayır* indexing Kemalist ideologies

On 14 January 2017, a group of users in *Ekşi Sözlük* initiated a movement called *hayır'lı günler* (Have a good day). By dividing the word *hayırlı* into its two morphological constituents with an apostrophe as *hayır'lı*, they created a context in which the interpretation of the word started to go hand in hand with voting 'no' in the constitutional referendum. Since the medium of *Ekşi Sözlük* provides its users with an environment in which they can link dictionary entries to others through hypertexts, authors who were going to vote for 'no' in the referendum highlighted the word *hayır/no* through hyperlinking *hayırlı günler* to *hayır'lı günler* on the website. Similar trends were also observed in the other phrases involving *hayırlı*, e.g. *hayır'lı işler* (have a good work) and *hayır'lı akşamlar* (have a good evening). In this regard, we interpret the following extracts in (4a-c) alongside this movement.

(4)

Thread: 'Hayırlı işler' – *Have a good work!*

Turkish	English
(a) January 14, 2017	
Çok müthiş ötesi ultra ekstra über işler için bir slogan. Neyse ben reserve alayım da lazım olacak...	It is slogan for an awesome, ultra, extra, über work. Anyway, I reserved this entry for the following days.
(b) January 14, 2017	

Çok güzel bir ekşi gençlik hareketi. Desteklenmeli ki en azından çorbada tuzunuz bulunsun.	It is a very nice Ekşi youth movement. It should be supported and one should give a hand to it.
(c) January 14, 2017 *(Bkz: **hayır'lı** işler)*	(See: Have a [good] work)

In (4a), the author forecasts the probable effect of the movement and draws the attention of the readers through magnifying its importance through the words *ultra*, *extra*, *über* which can be interpreted in the semantic content of 'above the ordinary'. The writer in (4b) invites the other users in the dictionary to join the movement and the author of (4c) directs the readers to the entry *hayır'lı işler* through a hyperlink.

Shortly after the initiation of the movement, no-voters took up the new indexical value on Twitter and Facebook and started to employ *hayırlı* with hashtags in presenting their good wishes, as in *#hayırlı günler/işler/akşamlar* and *#hayır'lı günler/işler/akşamlar*.[17]

Figure 2: Tweets sent involving *hayır(lı)* with and without hashtags (1st tweet: Have a [good] work, have a [good] day, have a [good] Friday…Have you ever thought why we are not going to say "yes" in the referendum? Because in every bad, there is [good]. 2nd tweet: Have a [good] work everybody. 3rd tweet: Have a [good] day, have a [good] work, have a [good] weekend, have [good] friends)

Figure 2 shows three tweets of the *hayır'lı günler* movement initiated by the users of *Ekşi Sözlük* earlier on the same day. In the first tweet, the user uses an apostrophe to highlight the word *hayır* to contrast it with *evet*. The second and the third tweets involve hashtags (e.g. #hayırlı), which were later adopted by the Twitter community to index that someone will vote *hayır* and not *evet*.

[17] Hashtags are also hypertextual in their nature. Clicking on a hashtag reveals every tweet using the same hashtag.

There have been endeavours in the past where individual opposition politicians also tried to employ *hayır* in its double meaning ('good' and 'no') to take a political stance, for instance during the electoral campaigns for the previous constitutional referenda in Turkey (1982, 2007 and 2010). However, this had not resonated with non-politicians and thus was not taken up by the target audience. Below we provide two statements prior to the 2010 constitutional referendum from Kemal Kılıçdaroğlu and Devlet Bahçeli, the presidents of the Republican People's Party (CHP) and the Nationalist Movement Party (MHP) respectively.

(5)

(a) Kemal Kılıçdaroğlu (CHP) – *8 July 2010*

Turkish	English
*Topluma karşı sorumluluk hisseden herkesi referandumda '**hayır**' demeye çağırıyorum. Halk arasında dendiği gibi '**hayırda hayır** vardır.'*	I invite people who care for this country to vote for '[no]'. Following the colloquial speech in Turkish, I can say that 'there is [good] in voting for [no]'.

(b) Devlet Bahçeli (MHP) – *2 August 2010*

Turkish	English
***Hayırda hayır** vardır. Bir başka deyişle 12 Eylül günü yapılacak olan halk oylamasından çıkacak olan sonuç beyaz veya kahverengi oyların birbirlerini aşan konumlarından ziyade 8 yıldan bu yana ülkemizi yönetecek AKP'nin ülke yönetimine devamına ilişkin bir yorumunu getirecektir.*	There is [good] in voting for [no]. In other words, the result of the referendum to be held on 12 September is more than the numbers. Rather, it will be regarded as the comment of the people on how the AKP, which has been ruling for 8 years, is going to manage the country.

It can be seen in (5ab) that both political actors from the opposition parties promote *hayır/no* with the colloquial saying 'There is good in voting for no'. Again, notwithstanding the similarity in the indexical meaning now evident in the fourth indexical order, back then the word *hayır* could not establish the same impact as in the course of the 2017 referendum. In the 2007 referendum, 68,95% of all voters voted evet/yes for the change in the procedures for the general elections (e.g., elections to be made every four, not five years; the president to be elected by the public, not by the parliament). In the 2010 referendum (57,88% evet/yes), the agenda was the revision of 30 amendments of the constitution prepared by a military junta and the minimisation of the effect of the military over the parliamentary system. In 2017 (51% evet/yes), people cast their votes on the change in the legislative system and the structure of the parliament. With regard to these voting outcomes, we put forward the idea that the

grade of political division in a society might have an impact on whether appropriated words can take up new indexical meaning. This will be discussed in more detail in chapter 2.4.

Contrary to the previous referenda in which political actors employed *hayır* in a top-down fashion, the current process shows a bottom-up pattern. Having been stigmatised by Erdoğan and the AKP, the people initiating the grassroots movement in *Ekşi Sözlük* described themselves as secular and committed to Atatürk's notions of statism. They reacted to the social structures presented to them by ruling ideologies through the political actors and the media, and they have started to contrast their employment of *hayır* with second and third-order indexical meanings to stress their presence and reclaim their space as the guardians of the democracy and the republic.

We now provide evidence for how the discourses of this grassroots movement of the no-side influenced the political actors of the no and the yes-side. We will then show how the yes-side reacted to the new indexical meaning. The cases we present comprise three contexts: (i) the *good day/work/Friday* case, (ii) how the meaning-making process reflected on no-campaigns, and (iii) how the yes-side tried to erase *hayır* from the public sphere.

The good day/work/Friday case

Wishing a *good day/work/Friday* in social media forms the initial phase of the meaning-making process. Evidence for this is given in a *hayırlı Cumalar* (have a good Friday) thread in *Ekşi Sözlük*. As already shown in the previously given examples of *have a good day/work*, people in Muslim countries give their good wishes to others in their communities on Fridays (Jumu'ah) since Friday is the congregational prayer day of the week. With the introduction of internet forums, e-mails and social media, this oral tradition has been maintained.

(6)

Thread: 'Hayırlı cumalar' – *Have a good Friday!*	
Turkish	English
(a) *23 December 2016*	

*Nasıl, **hayırlı** mı cumalar?* *Atatürk heykeli indirilirken, askerler soysuzlar tarafından diri diri yakılırken **hayırlı** mı?*	How? Are Fridays [good]? Wishing a [good] Friday while Atatürk's statues are being pulled down and soldiers burned by the bigots?
*12 saati aşkın süredir herhangi bir sosyal medya uygulamalarına doğru düzgün bağlanamıyoruz bile. vergisini verdiğimiz herhangi bir şeyden yararlanamıyoruz bile. yakında herkese **hayırlı** cumalar dilediğiniz Facebook'unuz bile kalmayacak.*	We haven't had connection to any social media applications in the last 12 hours. We cannot benefit from anything that we pay taxes for. In the future, you will not have any Facebook where you post your 'have a [good] Friday' wishes.
*Hadi **hayırlı** cumalar.*	Ok! Have a [good] Friday.
(b) *15 January 2017* *Nedense an itibarı ile Türkiye'de trend topic olan dilek.*	For some reason, it is a wish which is a trending topic in Turkey (Twitter trends).
(c) *27 January 2017* Herkese, bol **hayır'lı** ve mübarek bir gelecek.	I wish a [good] and blessed future to everybody.
(d) *27 January 2017* Bol **#hayır'lı** cumalar.	Have a plenty of [#good] Fridays.

As stated above, the no-voter's voices rested upon the political fragility towards secularism, which threatens the founding principles of the Turkish republic. In this regard, the argument presented in (6a) is one of the initial grassroots-stances taken by the people who were going to vote for 'no' in the referendum. The author in (6a) justifies his/her point through giving reference to recent incidents in Turkey that had been on the agenda of the no-side for some time. Trying to draw the attention of the readers and the other writers to the importance of this matter, the author in (6b) adds a description to the thread that reports Twitter trending topics in Turkey. (6c-d) provide examples of how people appropriated the use in social media, just as predicted by the extracts given in (4a-c).

In Turkey, the entries in *Ekşi Sözlük* go viral easily. It is one of the most-visited websites in Turkey (see footnote 9 above) which integrates social media such as Facebook, Twitter and other internet media content websites. Normally, this is a rather unidirectional process, in that social media often takes up entries, but not vice versa. In the context of 2017 referendum, however, reciprocal influence between *Ekşi Sözlük* and Twitter could be observed and thus the use of *hayır* managed to reach wider audiences. When people started to use hashtags with *hayırlı* alongside a picture of Atatürk and profile pictures with *#hayır* hashtags, the appropriation process went viral. Taken up by political opposition parties, this trend then spread so rapidly that the AKP

and its affiliates eventually had to actively react to it by employing counter-measures. Deniz Zeyrek, a columnist in one of the mainstream newspapers *Hürriyet*, noted that the bureaucrats and the yes-supporters in his address book and e-mail lists started to use *Cumanız mübarek olsun* instead of *Hayırlı Cumalar* (Hürriyet, Janaury 28, 2017) to avoid being affiliated with anti-government ideologies. The same trend was also adopted by pro-government journalists. The below extract shows some tweets by Hikmet Genç, who is a columnist in pro-Islamist daily newspaper *Yeni Şafak*.

(7)

Tweets by Hikmet Genç

Turkish	English
9 December 2016 *Asselamu Aleyküm… **Hayırlı** Cumalar…*	Peace be with you. Have a [good] Friday.
16 December 2016 ***Hayırlı** Cumalar…*	Have a [good] Friday.
30 December 2016 ***Hayırlı** Cumalar…*	Have a [good] Friday.
6 January 2017 ***Hayırlı** Cumalar…*	Have a [good] Friday.
13 January 2017 *Selamun Aleyküm… Cumamız mübarek olsun.*	Peace be with you. May your Friday be blessed.
20 January 2017 *Es'selamu Aleyküm… Cumamız mübarek olsun.*	Peace be with you. May your Friday be blessed.
27 January 2017 *Selamun Aleyküm… Cumamız mübarek olsun.*	Peace be with you. May your Friday be blessed.
3 February 2017 *Selamun Aleyküm… Cumamız mübarek olsun.*	Peace be with you. May your Friday be blessed.

Tweeted by a journalist who has around 325k followers, the meaning-making process launched by the grassroots of the no-side received a response that involves a deviation from the word *hayır* through employing a synonym *mübarek* (blessed).

Another turning point in this contagious nature of the use of *hayır* in wishes was Prime Minister Binali Yıldırım's substitution of *hayırlı* with a similar expression. This can be regarded as evidence for how the grassroots movement of the no-side affected the discourses of the political actors of the yes-side. Figure 3 depicts this unidirectional influence:

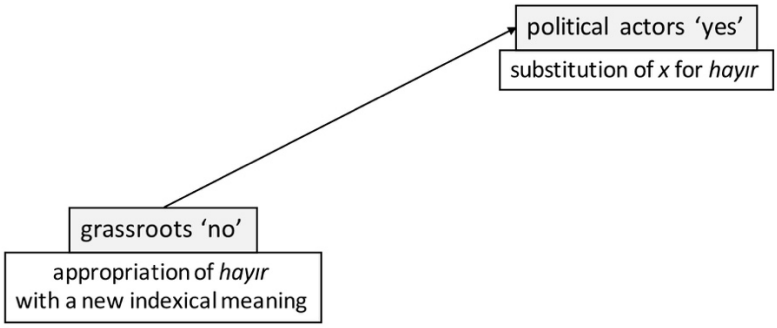

Figure 3: Meaning-making process: Grassroots of no-side → political actors of yes-side

The following extract (8) involves Prime Minister Binali Yıldırım's substitution of *hayır* in his public address in an unveiling ceremony on 11 February 2017 in Antalya:

(8)

Binali Yıldırım (AKP) – *11 February 2017*

Turkish	English
16 Nisan'da Türkiye'de yeni bir bahar olacak. Şimdiden uğurlu kademli olsun.	There will be a new springtime on 16 April. Let it be lucky.

In the context given in (8), it is widely known that the expression *hayırlı olsun* (congratulations, enjoy, etc.) has been used by politicians and officials who attend an unveiling ceremony. However, Binali Yıldırım substitutes *uğurlu kademli olsun* (let it be lucky) for *hayırlı olsun*.

The Minister of Foreign Affairs, Mevlüt Çavuşoğlu, similarly substituted *iyi/bereketli'mübarek* for *hayırlı* in one of his visits to a local market in Antalya on 24 February 2017. Below is an extract from an article in the mainstream daily newspaper *Hürriyet* on Minister Çavuşoğlu's handling of *hayır*:

(9)

Hürriyet – *24 February 2017*

Turkish	English
*[…]Dışişleri Bakanı Mevlüt Çavuşoğlu, Antalya'nın Döşemealtı ilçesinde pazar esnafını gezdi. Yaklaşık 2 saat süren ziyarette **'hayır'** kelimesini kullanmayan*	[…] Minister of Foreign Affairs Mevlüt Çavuşoğlu visited stallholders in a local market in Döşemealtı, Antalya. In his two-hour visit, Mevlüt Çavuşoğlu, who did not use the word [no], mostly used

Bakan Çavuşoğlu, sık sık 'İyi pazarlar', 'Bereketli pazarlar', 'Cumanız mübarek olsun' gibi cümleler kullandı. *Bazı vatandaşların '**Hayırlı** Cumalar' sözlerine, Bakan Mevlüt Çavuşoğlu'nun "**Hayır** yok, evet var" demesi dikkat çekti. […]*	the phrases 'iyi pazarlar' (Have a good market day), 'bereketli pazarlar' (Have a productive market day), and 'Cumanız mübarek olsun' (Have a blessed Friday). In response to some of the citizens' 'Have a good Friday' wishes, Mevlüt Çavuşoğlu draws the attentions by saying, "There is not [no], there is yes". […]

At the same time, pro-government parties tried to actively stigmatise *hayır* by adding negative connotations to the fourth-order usage. For instance, shortly after the *hayır* movement went viral, the leading pro-government newspaper daily *Sabah* got involved in the meaning-making process with an article titled 'perception games in TV dramas':

(10)

Sabah – *3 February 2017*

Turkish	English
*[…] Kanal D ve Star TV'de yayımlanan dizilerde, referandum öncesi halkın tercihini **'Hayır'** yönünde etkilemeye dönük algı çalışması dikkat çekiyor. 'Hayat Şarkısı', 'Kara Sevda' ve 'Adı Efsane' dizilerinde kurgulanan oylama sahnelerinde **'Hayır'** kararı çıkıyor ve 'Her şey **Hayır'lı** olacak' repliği vurgulanıyor. […]*	[…] In TV dramas televised in Kanal D and Star TV, there are perception operations in order to influence people's decisions towards '[No]' before the referendum. In dramas named 'Hayat Şarkısı', 'Kara Sevda' and 'Adı Efsane', the voting scenes result in '[No]' and the lines 'Everything will be [good]' are stressed. […]

As seen in (10), *Sabah* stresses and prioritises the word *hayır* through single quotes, initial capitals and apostrophes, and thus represents the emergence of the fourth-order indexicality with a construction of *hayır* as a red-flag word. Instantiated by such pro-government newspapers as *Sabah*, *Yeni Şafak* and *Yeni Akit*, and introduced by AKP's political actors, the word *hayır* was tried to be reconstructed as a word that is 'undesirable'.

AKP supporters partially took up this denigration attempt, as for example shown in (11), where an AKP supporter asks the Minister of Youth and Sports, Akif Çağatay Kılıç, to clarify his words:

(11)

Hürriyet – *4 March 2017*	
Turkish	English
*Gençlik ve Spor Bakanı Akif Çağatay Kılıç, Zonguldak'ta Ak Parti seçim bürosunun açılışını yaparken, "**Hayırlı** uğurlu olsun inşallah" dedi. Bakan Kılıç, arkasındaki bir kişinin "**Hayırlı** olmasın sayın bakanım" demesi üzerine, "Yok o anlamda değil. Bereketli olması, iyi olması, ülkemizin daha çok gelişmesi için, o anlamda **hayırlı** olsun diyoruz" dedi. [...]*	The Minister of Youth and Sports Akif Çağatay Kılıç said 'Let's hope that it will be [good]' while he was unveiling AKP's polls office in Zonguldak. In response to one of the people around that said, 'It should not be [with no] dear Minister', Kılıç said, "No, it is not in that sense. We say it will be [good] in the sense that our country is to develop further." […]

Following the construction of *hayır* as a red-flag word by the AKP discourse makers, an AKP supporter asks for a clarification on the use of the word *hayırlı* by the Minister Kılıç. Upon receiving comments from a supporter on his use of *hayır*, Kılıç justifies himself by implying that he is aware of the ongoing meaning-making process. Kılıç also uses *yok* in his response to the supporter (i.e., Yok o anlamda değil, lit. trans. "No, it is not in that sense") in a context where both *hayır* and *yok* are unmarked.

This attempt to denigrate *hayır*, however, was only short-lived, and political actors soon returned to reclaiming attempts. In Minister of Foreign Affairs Çavuşoğlu's speech on 14 March, he performed his second attempt to dismantle the fourth-order meaning of *hayır* linked to 'no'.

(12)

Hürriyet – *14 March 2017*	
Turkish	English
*[...] Bakan Mevlüt Çavuşoğlu, 16 Nisan'ın vatana, millete **hayırlı** olmasını dileyerek, "Ben **'hayırlı'** dediğimde bazıları şaşırıyor. **Hayırlı** işler, **hayırlı** günler, **hayırlı** cumalar demekten korkmayın. '**Hayırlısıyla** evet' diyoruz" dedi. […]*	[…] Presenting his [good] wishes to the country and the nation, Minister Çavuşoğlu said, "When I say [good], some people are surprised. Do not be scared when you say, 'Have a [good] work', 'have a [good] day' and 'have a [good] Friday'. We say '[Yes] with [good]' […]

In (12), the Minister of Foreign Affairs, who explicitly invented a substitution word for *hayır* 20 days earlier (see extract 9), attempts to reclaim the emerging indexical meaning of *hayır* by stressing the homonymic nature of the word, e.g. 'We are going

to vote for 'yes' with *hayırlı/good*'. Minister Çavuşoğlu is the only person to have used this phrase.

In summary, what we have depicted so far here is a reflexive dialogue contesting the indexical meaning of *hayır*: The political stance taken by the grassroots movement against the referendum campaigns of AKP yielded a fourth-order indexicality, and a subsequent reflexive stance taken by political actors of the AKP and pro-government journalists first substituted *hayır* with the help of invented words/phrases, then tried to add denigrating meaning to the fourth-order index, only to return to reclaiming attempts again.

Reflections in no-campaigns

The employment of *hayır* by the grassroots movement in referendum-related discourses was taken up by the political no-side which applied it to further design their campaigns.

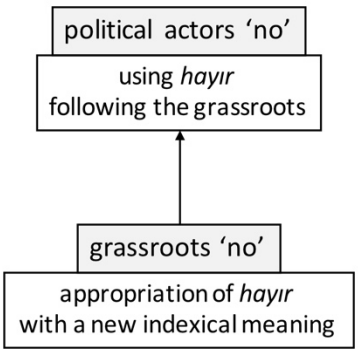

Figure 4: Meaning-making process: Grassroots of no-side → political actors of no-side

Extract (13) involves an excerpt from the news by *Hürriyet* about the Mayor of Çaycuma, a representative of the main opposition party CHP:

(13)

Hürriyet – *25 February 2017*

Turkish	English
[…] "Pazar yerinde restoran anlamında da fazla bir yer yok. Özellikle pazarcı esnafına vermek için böyle bir organizasyon yapmayı	[…] "There are not any restaurants around the local market. We aimed to provide stallholders with this service by

*düşündük, '**hayırlı** cumalar' diyerekten. **'Hayır'** sözcüğü moda bir sözcük. 'Evet' de moda bir sözcük bu dönem. Geçmişte '**hayırlı** cumalar' diyenler, bunu şimdi kullanmamayı tercih ediyorlar. Bu da bu işin esprisi oldu diyebiliriz. Ben Bülent Kantarcı olarak mesajlarımı her şekilde vermeye çalışıyorum. Mesaj almak isteyenler her zaman mesajı alabilirler."*	saying 'have a [good] Friday'. The word 'hayır' is trending nowadays. Similarly, the word 'Evet' is also trending. Those who say 'have a [good Friday] in the past prefer not to say that today. What we do can be regarded as witty. I, as the mayor of the city, Bülent Kantarcı, try to give my messages in any form. Those who want to receive my message can do so."

In (13), the Mayor of Çaycuma serves *Hayır çorbası* (No/good soup) to stallholders in a local market. In promoting this activity, the Mayor organises the event on a Friday and thus builds on the already-established political dialogue by the grassroots. That is, he serves the soup in the context of *Hayırlı Cumalar* (Have a good Friday). Upon being asked the question why he named the event as *Hayır çorbası*, his response shows a strong implicature that he is aware of the ongoing meaning-making process.

Similarly, Kemal Kılıçdaroğlu, the president of the CHP, employed *hayırlı* in his public speeches given in various parts of Turkey. Below, we provide an extract from one of his speeches which was given in Ordu:

(14)

Kemal Kılıçdaroğlu – *20 March 2017 reported by Anadolu Agency*

Turkish	English
*[...] Ne yaparlarsa yapsınlar ben bu milletin ferasetine güveniyorum. Ne söylerlerse söylesinler ben bu milletin sağduyusuna güveniyorum ve **'Hayır'** çıkacağına inanıyorum. **Hayırlı** bir iş olacaktır Türkiye için. [...]*	[…] No matter what they do, I believe in the understanding of the people of this nation. No matter what they say, I believe in the common sense of the nation and the result will be [no]. It will be a [good] job for Turkey. […]

The phrase *hayırlı bir iş* (good job) in extract (14) was employed by the CHP President Kılıçdaroğlu several times in his public addresses given during the referendum process.

Following Kılıçdaroğlu, the youth branch of the CHP started to treat *hayırlı kurabiye* (no/good cookie) to people in İstanbul. Below is an extract from daily *Hürriyet* about the event:

(15)

Hürriyet – *22 March 2017*

Turkish	English
*Title: CHP'li gençlerden işe gidenler için '**hayırlı** kurabiye'*	Title: '[Good] cookie' by CHP youth for those who are going to work
[...]	[…]
*Avcılar'daki CHP'li gençler akşam saatlerinde elbirliği ile hazırladıkları kurabiyeleri ambalajlayarak **hayır** broşürleri ile birlikte günün ilk ışıklarında işlerine gidenlere '**Hayırlı** sabahlar' diyerek dağıtırken bunu görenler şaşırdı.[...]*	By saying '[good] morning' while the CHP youth in Avcılar were treating the cookies, which they collaboratively prepared together with [no] leaflets, people who saw them were baffled. […]

In the context of (15), the youth branch of the CHP of Avcılar district in İstanbul builds on the same indexical order and treats *hayırlı kurabiye* (Good cookie) to people in İstanbul. In addition, along with the cookies, they also hand out their referendum brochures.

In the second context of the fourth-order indexicality, we have provided some evidence from CHP political actors and their youth branch who formed the no-side of the referendum. Emerging from grassroots, *hayır* reached a stage where it served as one of the major tools in no-campaigns.

Erasing 'hayır' from the public sphere

Upon being unsuccessful in disclaiming the fourth-order indexical meaning of *hayır*, the AKP's discourse, which went hand in hand with the government institutions, centred upon erasing it from the public sphere. We regard the meaning-making process occurring in this step as emerging out of the notions of power and dominance. Since the ruling ideology held the political materials over the referendum, they could actively engage in the production and reproduction of ideas or texts in domains ranging from politics to education and the media.

The following extracts from news texts are given as parts of the erasure process of the word *hayır* after it had been appropriated by the grassroots. The first extract is from a tabloid anti-government daily newspaper *Sözcü*:

(16)

Sözcü – *14 February 2017*

Turkish	English
*[…] Kentin çeşitli bölgelerinde ev ve işyerlerine dağıtılmaya başlanan ve panolara asılan afiş ve broşürlerde, şu ifadeler yer alıyordu: "Neyi kazanmak istediğinize karar verin… Çocuklarınızı zehirlemek ister misiniz? İktidarsız olmak ister misiniz? Tekerlekli sandalyede bir yaşam mı sürmek istersiniz? Kanser olmak ister misiniz? Kalp krizi geçirmek ister misiniz?. **HAYIR** diyorsanız, hayatınızı ve geleceğinizi kazandınız." Ancak broşürler, "**Hayır**" ifadesi nedeniyle, referandumla bağlantı kurulup yanlış anlaşılacağı düşüncesi üzerine toplatıldı. Broşürlerin basımı da durduruldu. AKP Konya Milletvekili Abdullah Ağralı da, "Broşürler önceden basılmış, yanlış anlaşılmaya neden olmaması için dağıtımı durduruldu" diye konuştu.*	[…] The booklets and banners which were started to be circulated and displayed in billboards were saying: "Decide on what you want to achieve… Do you want to poison your children? Do you want to become impotent? Do you want to continue your life in a wheelchair? Do you want to have cancer? Do you want to have a heart attack? If you say [NO], you win your life and future." However, the booklets were pulled off from the circulation in case of any misunderstanding related to [no] in the referendum. AKP MP of Konya, Abdullah Ağralı, stated that, "Those booklets were published beforehand. Its circulation was ceased in case of misunderstandings."

(16) involves a news extract about removing the 'no to smoking' booklets from circulation in Konya, which is one of the strongest electoral districts of the AKP. When asked about it by a journalist, Konya MP of the AKP states that the booklets were aborted in order not to yield a misunderstanding before the referendum.

The following news extract (17) involves an incident reported from Manisa, where the headmaster of the school changed the signboards located in the entrance of the school building:

(17)

Hürriyet – *23 February 2017*

Turkish	English
*Manisa'nın Yunusemre ilçesindeki bir okulun girişine 3 yıl önce asılan "**Hayırla** geldiniz" ve "**Hayırla** gidiniz" tabelaları, "Hoşgeldiniz-Welcome" ve "Güle güle-Goodbye" yazılı olan yenileriyle değiştirildi.* *Okul müdürü, kendisine "**hayırcı** müdür" denildiği için tabelaların kaldırıldığını açıkladı. Manisa İl Milli Eğitim Müdürlüğü, değişiklikle ilgili inceleme başlattı. […]*	In the town Yunusemre of the Manisa province, the old signboards in a school saying 'Come in [good] manner' and 'Leave with [good] manner' were changed to 'Hoşgeldiniz-Welcome' and 'Güle güle-Goodbye'. The headmaster stated that since people had called him '[no-lover] headmaster', the signboards were changed. The Provincial Directorate of National Education launched an investigation. […]

In (17), the headmaster of the school is pressured to change the plates saying *Hayırla geldiniz* (Come in good manner) and *Hayırla gidiniz* (Leave with good manner) to bilingual *Hoşgeldiniz-Welcome* and *Güle güle-Goodbye* ones. Although the news text quotes the headmaster saying that he personally made the decision, people working in administrative positions made similar decisions during the referendum period in order to not to be perceived as someone against 'yes'.

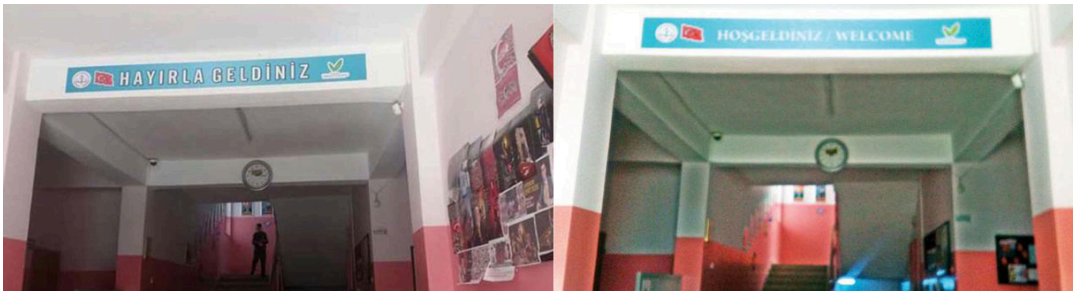

Figure 5: The banners in the entrance of a school in Manisa, before (Hayırla geldiniz / Come in good manner) and after (Hoşgeldiniz / Welcome). Source: Nermin Uçtu, DHA, February 22, 2017.

A similar incident to the one given in (16) was observed in Kocaeli, where the AKP municipality removed the phrase *su kayıp-kaçağına hayır* (say no to illegal use of water) from water bills:

(18)

Sözcü – *2 March 2017*

Turkish	English
*AKP'li Kocaeli Belediyesi'ne bağlı Kocaeli Su ve Kanalizasyon İdaresi Genel Müdürlüğü (İSU), su faturalarında yıllardır yer alan ve kaçak suya ilişkin yayınlanan **'HAYIR'** ibaresini çıkardı. Daha önceki faturaların üst bölümünde mavi şerit üzerinde 'Su Kayıp-Kaçağına **HAYIR**' yazısı yer alıyordu. Belediye ani bir kararla bu yazıyı referandum öncesi sildi. Yeni faturalarda "Temiz su insani bir haktır. Sağlıklı üretim bizden tasarruflu tüketim sizden. Sudan güç aldık" gibi bilgilendirme yazıları yer aldı.*	Water and Sewage Administration of the AKP Municipality of Kocaeli removed the expression '[NO]', which is related to illegal use of water, from the water bills. The captions saying 'say [NO] to illegal use of water', which was previously located in the upper part of the bills with blue tapes, were removed. In the new version of the water bills, it now says "Clean water is a human right. We are responsible for the clean water and you have the right to consume it." […]

The protagonists of the news reports given in (16-18) justify their erasure attempts by probable misunderstandings. However, we observe in similar incidents prior to the referendum that protagonists felt pressured to erase *hayır* from the public sphere.

2.4. Discussion

Our analysis has shown that *hayır* has acquired its meaning extensions through Neo-Ottoman interpretations of religious 2nd-order meaning. However, in the 4th indexical order, we encountered an important change in signification.

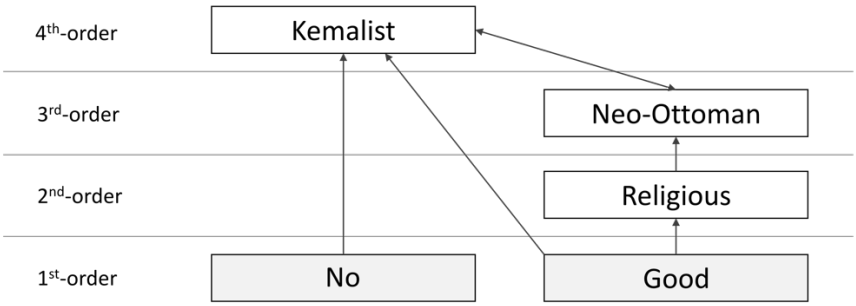

Figure 6: The indexical orders of *hayır* revisited

In our post-hoc analysis, we were able to show that the direction of this meaning change seemed to lie in the indexical properties of the word itself, which extends both diachronically and synchronically through its indexical orders. *Hayır* extends diachronically because the indexical orders were added over the timespan of the last millennium, and synchronically because all indexical meanings are available at the same time for agents to create new indexical meaning. This strengthens the position of the studies reported in chapters 2.1 and 2.2: the case of *hayır* clearly shows that people engage in meaning-making in a systematic way. By employing homonymous 'no', a first-order meaning which has not acquired indexical meanings similar to 'good' in the previous indexical orders (see figure 6), the grassroots of the no-side, who advocate that the new constitution betrays the country's founding principles among which secularism is the key, introduced a fourth-order indexicality that diametrically opposes the second and third-order indexical meanings of 'good'.

By engaging with the indexical past of *hayır*, political activists projected other speakers who use the word in their second or third-order meaning into their own usage of the term to create a contrast. Employing *hayır* with its fourth-order meaning yields a fictional Kemalist-persona that in the 2017 referendum opposed a fictional Neo-Ottoman persona who employs it with its third-order meaning. We thus witness in the same word two different registers associated with different personae (see Gal, 2016b, p. 121). As we have shown in our discussion of the fourth indexical order, pro-governmental agents could not simply ignore this source of misunderstanding. *Hayır* did not become so powerful simply because some people tried to claim it for their own purpose. It became so powerful because it tells us the story of a looming political division in Turkey. The ruling party itself plays a crucial role in how this division came into being, and as such it had to react not only to a lexical vilification but to a threat to its own regime. The political division in Turkey is thus evident on different scales: the point of contention at the level of society is clearly reflected in the fight over the linguistic sign *hayır*, which does not carry one single meaning but an indexical dialogue of different viewpoints.

Bakhtin (1981 [1934-35]) referred to this dialogic characteristic as heteroglossia, claiming that speakers never only speak for themselves, but in doing so invoke the voices of others as well, and with them the social and cultural contexts in which the utterance has been embedded. Often, however, it is not so clear which voices or contexts in particular are echoed in a heteroglossic utterance. Ducrot (1984) therefore claims that 'it is necessary to dissect the different enunciative layers that make up the utterance' (Angermuller, 2014, p. 43). Indexical orders, as we have shown, prove a useful tool to sketch out these layers (see figure 6). From this follows, in turn, that indexical meaning-making needs to be understood as a reflexive/polyphonic (Bakhtin, 1981 [1934-35]; Ducrot, 1984) phenomenon, because it incorporates different voices, opinions, or other levels of contrast existing in society – just like it can create what we perceive as contrasts at a broader level in the first place. Irvine and Gal (2000) discuss this in depth when they speak of linguistic differentiation, a concept which partly draws on Voloshinov (1986 [1929]). Voloshinov, coming from a Marxist position, claimed that the linguistic sign is deeply social in nature, as opposed to what he called

abstract-objectivist conceptions of the sign. Ideology and language, for Voloshinov, are not entities simply derived from the consciousness of the base structure – they determine consciousness in the first place. Because each usage of a word leaves a mark for subsequent usage or reception, ideology and the linguistic sign cannot be separated from one another. Each sign 'refracts' a social reality outside itself: the context in which it was used, by whom it was used, who was forbidden to use it in a similar way, etc. Class struggle, thus, also happens at the level of the linguistic sign, as speakers regularly fight over to whom a linguistic sign belongs.

When Irvine and Gal (2000, p. 38) speak of fractal recursivity as one mechanism of linguistic differentiation, they capture methodologically how 'different levels of contrast [...] within a cultural field' are semiotically 'refracted'. Fractal recursivity, for them, 'involves the projection of an opposition, salient at some level of relationship, onto some other level' (ibid.). In the 2017 Turkish referendum, this opposition is binary due to the nature of the referendum: people could either vote to endorse a Neo-Ottoman ideology (*evet*) or to sustain the competency of the parliamentary system (*hayır*), and one excludes the other (as in $A \longrightarrow \neg B$). This opposition is projected onto *hayır* in the form of a complex indexical history which reflects – refracts – the sociocultural contrast. Similar projections can be found in lexical appropriations in the context of cultural theft and/or degradation of a marginalised group (see chapter 2.2). African Americans, Hispanics, 'slum dwellers' in Brazil, *tongzhis* in Hong Kong – these are all marginalised groups in their respective surroundings, and the (re)appropriation of their semiotic resources by the major society or other stakeholders refracts a cultural contrast of two or more clashing ideologies. As was shown in chapter 2.2, appropriation can either amplify a cultural opposition, for instance by performing whiteness at the expense of African Americans/Hispanics; or water it down, as in the case of repackaging 'slum dweller' in Brazil; or utilise it for the sake of unification and protection, as in the case of LGBT-communities appropriating *tongzhi* in their fight for equal rights. All these strategies are inherently political in nature, if understood in a broad sense, as different stakeholders are involved in endorsing their, possibly competing, ideologies. In the fight over semiotic resources, their ideologies

become, in a way, manifest. To speak with Voloshinov (1986 [1929], p. 33), they become *ideologemes*.

The saliency of such existing cultural contrasts seems to influence the aptness of an appropriated item to acquire new indexical value. Peirce (1932 [c. 1897], p. 172) famously argued that 'nothing is a sign unless it is interpreted as a sign'. Following this assertion, for an index to be interpreted as such, it needs to be part of a wider shared repertoire. Hence, racialised or sexualised cultural dividing lines seem to be prone to indexical meaning-making because of their socio-political saliency – hardly anyone has no opinion on these matters. But several cultural contrasts can facilitate enregisterment, as evidenced in the case of *hayır*: in the second indexical order, secular endeavours under Atatürk made *hayır* indexical of the religious as opposed to what many Turks have perceived as the Western part of society. In the third indexical order, political control over the media and the internet politicised that very index, which became indicative of a political distinction between Kemalists and Neo-Ottomans that surfaced in post-1980 Turkey. In the fourth order, in the 2017 referendum, *hayır* was enregistered due to a stark socio-political contrast that emerged from this distinction. As already hinted at in chapter 2.3.4, there have been endeavours in the past to add the same fourth-order indexical meaning, but they all failed. In the 2010 referendum, the agenda was the revision of 30 amendments of the constitution prepared by a military junta and the minimisation of the effect of the military on the parliamentary system. Voting *evet* was the democratic choice – however, it was a democratic choice in the eyes of the EU more than it was for the Turkish opposition parties. For the EU, weakening the influence of the military meant complying with EU constitutional standards, which is an important step towards EU membership. However, as seen in chapter 2.3.4, the CHP promoted *hayır* despite being pro-EU because they felt that weakening the influence of the military would lead to a renewed political instability. The political opposition was not in agreement how to handle this issue. In 2017, on the other hand, people cast their votes on the change in the legislative system and the structure of the parliament. Voting *evet* meant fuelling an authoritative regime, and making the democratic choice was clearly expressed with *hayır*. The ideological Neo-Ottoman baggage *hayır* had acquired previously to the referendum then opened the

door for this front to engage in a 'language game' (Wittgenstein, 2013 [1953]), the one we described in the fourth indexical order. A unified political opposition was more receptive to indexical meaning making because they shared the common goal of protecting the democratic state. The potential loss of democratic rights, paired with the impossibility of taking a "real" political stance due to censorship and oppression, enabled the sign vehicle *hayır* to acquire new indexical meaning denoting political opposition. It became part of the repertoire of a wider audience, and because of this it became so powerful.

2.5. Conclusion

In this paper, we have applied the theory of indexicality and indexical orders to account for the meaning change of *hayır* in the context of the 2017 referendum in Turkey. In the first indexical order, *hayır* as an Arabic loanword means both 'no' and 'good' and is thus homonymic in nature. 'Good' acquired new indexical meaning by being linked to religious practices, and eventually became associated with the AKP as the sole representative of the political Islam that builds upon Neo-Ottoman interpretations of the religious practices. In the course of the 2017 referendum, the grassroots movement contested these ideologies by playfully engaging with the first, second and third-order meaning of *hayır*. By employing homonymous 'no', a first-order meaning which had been sidelined in the previous indexical orders, the grassroots of the no-side, who advocated that the new constitution will yield a country that betrays its founding principles among which the secularism is the key, have introduced a fourth-order indexicality that diametrically opposes the second and third-order indexical meanings.

We have argued that this meaning-making is a systematic process. We distinguished in our analysis between the trajectory of the meaning change, which we claim is set by its indexical properties, and the amount of thrust behind it, which we claim is set by the socio-political surroundings projected onto the appropriated item in question. This forestalls shortcomings often attributed to semiotic accounts within sociolinguistics. Silverstein, for instance, has been criticised on the grounds that his theory of indexicality focuses too much on the linguistic sign, without bothering too much with how e.g. indexical orders are socially constructed (Blommaert, 2007; Joseph, 2013, p.

3). In this paper, we have tried to persuade readers that we get the most out of our analyses if we take both sides into account. We have shown that studying how language is used sheds important light on the linguistic sign. This is why Silverstein (1976) introduced the concept of indexicality in the first place (see chapter 2.1): indexicality, itself the result of sociolinguistic behaviour that extends beyond utterances in *situ*, is an individual sign mode, which can only be accounted for by analysing how the sign is used. The different indexical orders of *hayır* came into being for socio-political and historical reasons, and when analysed in detail, they reveal how speakers have always affected the semantic content of the word over the last millennium. As such, sociolinguistic agency is part and parcel of the linguistic sign. Shedding light on individual properties of the linguistic sign (i.e., the sign vehicle, the object, and indexicality), in turn, brings 'theorized order' (Silverstein, 2003, p. 194) into how speakers engage in semiotic meaning making. Only by digging up the indexical past of a word invoked in a meaning change are we able to grasp the whole picture. Our analysis of *hayır* shows that accounts focusing on the motivations of the speakers alone fall short of the mechanics at work.

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CHAPTER 3: LANGUAGE IN AND OUT OF SOCIETY: CONVERGING CRITIQUES OF THE LABOVIAN PARADIGM[18]

Lately, sociolinguistics has undergone a theoretical reorientation which has been discussed from various viewpoints (Coupland, 2016c), all of which advocate for a 'need to reinterpret language (including dialect) variation in terms of social semiotic processes' (Coupland, 2016a, p. 437). This reorientation is grounded in a fundamental critique of classical variationism in the Labovian tradition (Labov, 1972b, 2006 [1966]).

There appear to be two levels of critique of the orthodox Labovian paradigm, here to be understood as the work undertaken until approximately the turn of the millennium. On the one hand, so-called third-wave variationism (Eckert, 2012) criticises Labov's (2006 [1966]) relatively static use of sociological macro-categories and style by addressing the way individuals alter their phonemic repertoire in locally situated communities of practice (Eckert & McConnell-Ginet, 1998; Moore, 2004; Podesva, 2007; Zhang, 2005, 2008). In this line of thought, sound change, which Labov and Labovians have always taken as the chief phenomenon they aim to explain, has been treated as a given, and it has been argued that individuals can take up a change to determine the trajectory or advancement of this change (Eckert, 1988, pp. 197-198; 2008, p. 454; 2016, p. 78; Eckert & Labov, 2017, p. 467).

The relative autonomy of linguistic processes, however, has been challenged with recourse to what Silverstein (1985) theorises as the 'total linguistic fact'. Grounded in the framework of indexicality (Silverstein, 1976), it challenges the idea that language change can be taken as a given (e.g. Silverstein, 2016, p. 63) and seeks explanations

[18] The following chapter appeared in print as Woschitz, J. (2019). Language in and out of society: Converging critiques of the Labovian paradigm. *Language & Communication, 64*, 53-67.

for it in the semiotic performance of speakers, aligning, for instance, their phonetic realisations with indexical functionality.

These two strands of criticism, represented by Eckert and Silverstein, have started to converge in recent scholarship, and this, I argue, is part of an ontological reorientation of variationist sociolinguistics, by which I mean that key entities posited to exist according to the theory (language, society, etc.) have fundamentally changed. Put differently, it would be oversimplifying nowadays to speak of "one kind of Labovian variationism", because these criticisms have resonated with Labov's own later work as well. To show this, I will first outline the ontological groundings of orthodox Labovian sociolinguistics. I will then outline how these have been challenged. Finally, I shall discuss how the two poles of criticism fall at different hurdles, and will discuss important issues that deserve more attention, should one wish to resolve issues arising from this.

3.1. The ontological groundings of orthodox Labovian sociolinguistics

Perhaps one of the most long-standing contentious points in linguistics addresses the question how exactly language and society are related. Much ink has been spilled over it, and linguists have attributed differing importance to the social components of language, particularly in the discussion over sound change. The Neogrammarians, for instance, were eager to conceive of linguistics as a natural science, and by positing their famous exceptionless sound laws, they limited considerably the influence of the social sphere on what they conceived of as linguistic structure. Saussure's (1857-1913) student, Antoine Meillet (1866-1936), held against this notion when he famously proclaimed that a language is a social fact. In his line of thought, changes in the linguistic structure can only be explained with recourse to changes in the social structure (see Labov, 2001, pp. 22-23). Meillet's student, André Martinet (1908-1999), was more ambivalent. Though acknowledging that we have to consider 'language-external' factors (to him, influences from other languages or dialects), Martinet (1952, p. 28) claimed that the importance of 'non-linguistic' (read: social) factors may 'well have been grossly exaggerated by our predecessors', and that linguists do best in exploring the functional economy of phonological systems.

When Labov entered the academic scene in the 1960s, his own work built on a long-standing quarrel. His impetus on the scholarly conception of language, much of which he himself has credited to his mentor Uriel Weinreich (1926-1967), has addressed the social-asocial debate mentioned above (Labov, 1972b, pp. 264-265). Labov has criticised among other things Bloomfield's (1933) and Hockett's (1958) assumption that sound change is too slow to be observed, and that 'non-linguistic' data should be categorically excluded from linguistic analysis (Labov, 1963, pp. 291-292; Murray, 1998, p. 166). As to the first point, Labov (1994, pp. 43-109) has shown that, with the help of meticulous apparent-time and real-time analyses, one can depict how vowels raise/fall//front or move to the back over generations. As to the latter point, Labov (2001, p. xv) has shown that these sound changes can only be understood with recourse to 'the material substratum' in which they are embedded: the speech community. This speech community, and this is probably the cradle of modern sociolinguistics (for a more historically accurate account, see Joseph, 2002, chapter 5), is not a uniform, homogeneous set of speakers but an 'orderly heterogeneous' collective (Weinreich et al., 1968, p. 100), in which different realisations of 'saying the same thing' (e.g. [sʌmθɪŋ] vs. [sʌmθɪn] with velar vs. apical nasal) can be located along social boundaries (e.g. higher vs. lower social class). The concept of a speech community thus unites linguistic structure with social aspects of language use, and as such it discards the whole social-asocial distinction. Hence the importance of the famous (2006 [1966]) *New York City English* study, in which Labov has unprecedentedly generalised that we can find sociolinguistic variation within language varieties that is not explainable by mere idiolectal differences or free variation but by large-scale social mechanisms that underlie each and every community.

Thus, Labov's achievement was to show empirically that a language is inherently social because we cannot make full sense of it when abstracted from the social context in which it is practiced. This reaffirms Saussure's conception of a language as a social fact[19], and much like Saussure, Labov has argued that we can only make sense of changes at the level of whole languages (the Saussurean *langue*) by systematically

[19] But see Labov (1972b, pp. 185-186) for how he criticizes Saussure on the basis of his conception of 'the social'.

including in our analyses the study of *parole*, that is, how people use language in their everyday lives (Figueroa, 1994, p. 71). The study of *parole*, in Labov's work, is methodologically constrained to sociological macro-categories (if he discusses individuals like Nathan B., as in Labov, 2006 [1966], they are treated as tokens of a social type), in his own studies most often but not exclusively social class and gender. It is these patterns at the level of the speech community that are interesting to him, and he conceives of them as Durkheimian social facts (Figueroa, 1994, p. 72), i.e. as social patterns that emerge from the collective beyond individual manifestations:

> [A social fact is] every way of acting, fixed or not, capable of exercising on the individual an external constraint; or again, every way of acting which is general throughout a given society, while at the same time existing in its own right independent of its individual manifestations. (Durkheim, 1938 [1895], p. 13)

This sociological tradition is inscribed in Labov's (2006 [1966], p. 5; 2016, p. 598) central dogma of sociolinguistics:

> Language as conceived in this book is an abstract pattern, exterior to the individual. In fact, it can be argued that the individual does not exist as a linguistic entity. [...T]he individuals we study are conceived of as the product of their social histories and social memberships. (Labov, 2006 [1966], p. 5, the quoted passage was written in 2006)

Labov has been criticised on the grounds that his recourse to social memberships (e.g. social class or gender) as predictors for linguistic variation and change is overdeterministic and unreflecting (e.g. Ash, 2004; Coupland, 2016a, p. 436; Woolard, 1985). Indeed, his work seems to provide little account of how individuals are socialised into the bigger social patterns in question (Figueroa, 1994, p. 88). But this might follow from the fact that Labov adheres to a Weberian sociological theory rather than a Marxist one (see Ash, 2004, p. 403). Weber saw social class as a neutral organising principle, and it is he who coined the term 'social stratification'; while Marx's goal was to uncover class structures in order to overcome them (ibid.). Labov's socio-political impetus lies elsewhere, particularly in his defence of African American Vernacular English as an autonomous, non-deficient variety of English (Labov, 1972a; see also Pullum, 1999), which has been nearer and dearer to him than the unjust inheritance of social status or educational mobility. Social class and gender, in fact, are mere stand-ins to him for social processes at work. Labov's (2006 [1966]) finding

that change below the level of conscious awareness ('change from below', to be discussed in the following paragraphs) coincides with the lower middle and upper working class does not indicate a mechanism of social class itself. It is the social centrality that is relevant, and sometimes it maps onto stratifications of social class, but which social organising principle it maps onto is ultimately a matter of cultural contingency (Labov, 2001, p. 188; 2006 [1966], pp. 203-208). Likewise, with regard to gender, it is the community-specific ways in which gender is performed, for instance how women in Western societies have engaged in social networks differently from men, that are responsible for the often-found leading position of women in phonological change (Labov, 2001, chapters 8 & 10). A critique that is merely geared towards the use of social macro-categories, therefore, misses the important point that the adherence to sociological terms (social class, gender, etc.) does not preclude the importance of interactional components that might be decisive on how these larger patterns come into being. In fact, it is even acknowledged in the founding manifesto of variationism that the 'actuation problem' and the 'embedding problem', i.e. how a change comes into being and how it is embedded in linguistic and social relations, can only be addressed by taking these components into account (Weinreich et al., 1968, pp. 183-187).

The issue that underlies current theoretical debates within sociolinguistics goes deeper and should not only address the methodological implementation of sociological methodologies but also the ontological presuppositions in which they are implemented (see e.g. Coupland, 2016c). Figueroa (1994, p. 144) argues that what has separated variationist work from other sociolinguistic endeavours in this regard is its ontological commitment that allows for a clearly distinguishable social and linguistic side. This is self-evident in Labov's trilogy on principles of linguistic change (1994, 2001, 2010), where he devotes different volumes to internal and social factors, and not for didactic reasons:

> When the analyses are carried out, it appears that the two sets of factors - internal and external - are effectively independent of each other. [...] These basic sociolinguistic findings provide the methodological rationale for the way the material in volumes 1 and 2 is divided and for the separate discussion of internal and external factors. (Labov, 1994, p. 3)

Internal factors are, for instance, principles that underlie chain shifting and cut across various languages, such as the raising of long vowels, the lowering of short vowels, the lowering of diphthongal nuclei and the fronting of back vowels (ibid., p. 122). Labov's contribution to the long-standing dispute within historical phonology over finding a common denominator in sound changes of the past is an elaboration of Stockwell's (1966) suggestion to subdivide the phonological space into a peripheral and a non-peripheral area. This then allows for the simple generalisation that, in chain shifts, 'peripheral vowels become less open and nonperipheral vowels become more open' (Labov, 1994, p. 601). Combined with other principles that describe regularities in diphthongisation (the Upper and Mid Exit Principle, ibid.), this principle accounts for a range of ongoing changes (e.g. the Northern Cities Chain Shift) and changes in the past (e.g. the Great Vowel Shift). Importantly, these principles are governed by Neogrammarian regularity: they operate beyond lexical constraints, show gradual and not discrete movement, and are subject to phonetic conditioning (ibid., pp. 455-471).

How does the speech community come into play? After all, one important dictum of the Neogrammarians was that the social sphere beyond dialect borrowing or analogy has only little influence on language change, a vision they did not share with dialectologists, who looked for explanations for sound change in the lexical diffusion of words (Labov, 1994, chapter 17). Part of the answer lies in Labov's own narrow conception of the speech community itself, whose members are 'united by a uniform evaluation of linguistic features, yet diversified by increasing stratification in objective performance' (Labov, 1972b, p. 117; see also Labov, 2001, chapter 6). Even though casually formulated, an important ontological statement looms in this definition. Given that most sound changes happen below the level of conscious awareness (Labov, 1994, p. 471), there is nothing there for the speech community to comment on for the most part. If the speech community is nonetheless 'diversified by increasing stratification in objective performance', it is in large part due to phonological changes surfacing in different phonetic realisations along social boundaries such as age or gender. Younger people and women, for instance, have been found to make more use of novel linguistic forms compared to their elder and male counterparts (see e.g. Labov, 2006 [1966], pp. 197, 208) – even if they are not conscious of it. As shall be laid out by the end of this

chapter, this is one of the reasons why they are treated as the social correlate of linguistic factors. More specifically, the speech community is downgraded to a passive recipient of Neogrammarian change, which is treated as a distinct ontological reality guided by 'language-internal factors'.

The distinction along the lines of availability to social evaluation is taken up in Labov perceiving a 'narrow interface between language and society':

> For the most part, linguistic structure and social structure are isolated domains, which do not bear upon each other. [...] The force of social evaluation, positive or negative, is generally brought to bear only upon superficial aspects of language: the lexicon and phonetics. (Labov, 2001, p. 28)

Social evaluation, in the majority of all cases, is operationalised as conscious, overt commentary which is restricted to surface forms – though it might be unconscious and unavailable for productive manipulation as well (see the below passage on style-shifting). Regardless, Labov distinguishes between changes from 'above' and 'below' the level of conscious awareness.[20] While change from above can be rather easily explained because it describes e.g. overt prescriptions of correct speech from the ruling classes, change from below has remained rather opaque and undertheorised (e.g. Labov, 1972b, pp. 178-181; Labov, 2006 [1966], pp. 203-209). In Labov (1994, p. 542), change from below is a stand-in for regular sound change which is governed by Neogrammarian regularity (see above). It is

> the result of gradual transformation of a single phonetic feature of a phoneme in a continuous phonetic space. It is characteristic of the initial stages of a change that develops within a linguistic system, without lexical or grammatical conditioning or any degree of social awareness ("change from below"). (ibid.)

Change from above, in turn, is a stand-in for erratic lexical diffusion. It is

> the result of the abrupt substitution of one phoneme for another in words that contain that phoneme. The older and newer forms of the word will usually differ by several phonetic features. This process is most characteristic of the late stages of an internal change that has been differentiated by lexical and grammatical conditioning, or has

[20] Change from below was never meant to indicate 'change from lower classes', and, in retrospective, Labov (2006 [1966], p. 203) admits that it probably would have made more sense to call them change from 'within' and 'without' the linguistic system of a speech community (see also Labov, 2007, p. 346).

> developed a high degree of social awareness or of borrowing from other systems ("change from above"). (ibid.)

The described mechanism, then, is simple. At some point in time, a new linguistic feature (e.g. the raising of a vowel) emerges within a speech community. In most cases, the change follows regular trajectories (e.g. peripheral vowels raise, while non-peripheral vowels lower) and is conditioned by language-internal factors (e.g. raising is preferred when followed by a nasal and dispreferred when followed by a liquid). It then spreads across the speech community until, towards the completion of a change, it can become subject to social commentary. If this happens, speakers can consciously adjust their own speech behaviour according to the social evaluation, but they do so only superficially and fragmentarily (Labov, 2001, chapter 6).

Curiously, however, even the embedding and actuation of changes from below pattern along social dimensions. This becomes apparent in a), the vast evidence of style-shifting, and b), the general social patterning of changes from below. As to a), Labov (2006 [1966]) has distinguished between various stylistic settings, ranging from casual speech, the most informal style, to reading out word lists, a more formal style. Depending on the type of change involved, the phonetic pronunciation of phonological targets can change according to the stylistic context. In changes from above, for instance, prestigious variants are tendentially preferred in more formal contexts (e.g. in formal interviews), whereas stigmatised variants are tendentially restricted to informal contexts. In changes from below, speakers have been often found to use more novel forms in informal contexts (see e.g. Labov, 2006 [1966], p. 197). This supports Labov's view that the vernacular, or "morning side speech", has primacy over socially corrected speech. More importantly for this argument, however, it suggests that speakers are sensitive to social evaluation even when they are not aware of their own changing pronunciation – otherwise they would use novel forms in formal and informal contexts alike. As to b), it has been empirically shown that changes from below originate in central social groups (e.g. lower middle class or upper working class) and in lower class neighbourhoods, and that upwardly-mobile women overwhelmingly lead in the use of novel linguistic forms (Labov, 2001, chapters 5, 7-8).

Both bullets pose the interesting question how linguistic phenomena which are not available to the conscious experience of speakers interact with the social domain. This problem Labov inherited from Saussure himself, who struggled with similar issues concerning the unconscious and social behaviour without ever resolving them (see Joseph, 2000). Labov's take seems to be to posit so-called language-internal processes following their own rules and mechanics, which are then embedded into and carried forward by a social structure (a speech community). This relative unidirectionality is an empirical matter, but more and more research (to be discussed in the following chapters) points towards this not necessarily being a one-way road. It is here where Labov's narrow interface between language and society becomes problematic.

In more detail, Labov (2001, pp. 29-33) investigates the embedding of language-internal processes by studying the social characteristics of leaders of linguistic change. These have been portrayed as follows:

> we find that they are women who have achieved a respected social and economic position in the local networks. As adolescents, they aligned themselves with the social groups and symbols that resisted adult authority, particularly when it was perceived as unfairly or unjustly administered, without deviating from their upwardly mobile path within the local social structure. (ibid., p. 409)

However, Labov remains faithful to his own logic in admitting that these characteristics cannot explain their linguistic choices of which they themselves are unconscious, for instance small changes on the F2 domain (ibid.). These are better explained by their non-conforming behaviour in language socialisation. Labov (ibid., p. 437) argues that children acquire early in their childhood the formal/informal distinction of linguistic variation (which can subsequently lead to social stratification, for instance when working class speech is considered 'impure'). New linguistic changes are by definition informal because they do not match the linguistic status-quo. By analogy, they are then 'unconsciously associated with non-conformity to sociolinguistic norms, and advanced most by youth who resist conformity to adult institutional practices' (ibid.). Since it has been empirically shown that females conform less to sociolinguistic norms that are not prescribed than men (ibid., p. 293), and that children acquire their vernacular from their female caretakers (ibid., chapter

9), this nonconforming behaviour can account for generational linguistic change from below without recourse to any conscious agency.

It is by this means that Labov aims to uphold the linguistic/social distinction. Unconscious continuation of a sound change is the 'material substratum' (ibid., p. xv) of how 'internal' factors operate. This allows Labov to distinguish between what could be called a *social patterning of linguistic factors*, and other *social factors*, which, when narrowly construed as changes from above, hinge on the conscious awareness of a linguistic feature. It is this distinction that lets orthodox Labovianism avert the danger of conflating the linguistic/social distinction into one. And it is this distinction that has recently been called into question, and which the remainder of this paper shall address.

3.2. The (non-)conformity of third-wave variationism

Following this train of thought, Labov's orthodox language/society distinction hinges on the limits of awareness (on which see Silverstein, 2001). Sociolinguistic agency, if one wants to remain faithful to the distinction, seems to be separated into two domains: Unintentional agency is restricted to changes from below and remains socially 'meaningless' on account of the speech community not being able to overtly comment on it. Intentional agency is relevant when it comes to describing changes from above, for instance the overt prescription of correct speech or the social commentary on changes that near completion, which are also described with recourse to social facts. In the famous department store study, for instance, Labov (2006 [1966], chapters 3 and 12) showed that, in more formal styles, the second highest status group hypercorrects its r-usage because of its linguistic insecurity. Since this pattern is empirically generalisable for various speech communities, he postulated hypercorrection as a social fact that is indicative of whether a change from above or stable variation is observed (Labov, 1972b, chapter 5; 2006 [1966], p. 167).

From a 'social action' perspective (Coupland, 1998, p. 114), resorting to such patterns takes for granted how 'the social' is performed linguistically in everyday life. Labov (2006 [1966]) was not interested in how New York City citizens attribute social meaning to rhotic forms in everyday life. Yet, there is a lot of insight to be gained from

how social meaning is constituted in day-to-day interaction. This is why some of Labov's former students, with Penelope Eckert leading the way, have started to add such interactional components to the variationist framework. Eckert's (2012) wave-model puts forward the idea that some sociolinguists (e.g. Campbell-Kibler, 2007; Podesva, 2007; Sharma, 2011; Zhang, 2005, 2008) have turned away from social facts in their analyses in favour of a systematic analysis of how speakers take up and attribute new meaning to linguistic features. They do so by expressing their identity through voicing of characterological figures/personae. For instance, Zhang (2005) has shown that professionals in Beijing use full tone variants and less local features to voice a yuppie (young urban professional) persona. Sharma (2011) has shown that British Asians make systematic use of retroflex /t/ to voice in-group affiliations to ethnic communities. Podesva (2007) has shown that one gay man uses falsetto to voice the persona of a 'flamboyant diva' in order to express his homosexual identity.

These studies shed light on how social meaning is attributed to linguistic variables in day-to-day sociolinguistic interaction. The underlying idea is that sociolinguistic variables (e.g. full tone variants in Beijing Mandarin or [t̪] in British Asian English) can have a range of possible meanings (they spread out an 'indexical field', Eckert, 2008). Specific meanings are activated contextually (see e.g. Levon, 2016) in locally situated communities of practice (Eckert & McConnell-Ginet, 1998), and can subsequently spread to a broader level of the speech community (e.g. Agha, 2003, p. 259). As such, third-wave approaches can add explanatory depth to orthodox Labovian variationism because they provide a means to explore how sociolinguistic variables are the outcome of agentive semiotic practice. Crucially, however, it is not assumed that speakers are consciously aware of their own socially-meaningful agency (see e.g. Eckert, 2016, pp. 77-79; Eckert & Labov, 2017, p. 470; Zimman, 2017, p. 366, footnote 1). Whether this challenges Labov's ontological commitment to a clearly distinguishable social and linguistic side is not so clear. Eckert herself has been ambivalent in sorting out the ontological implications of her own school of thought. Notice, for example, her 2008 account of this matter:

> To seek explanations for chain shifts in the day-to-day construction of meaning would certainly be futile and ridiculous. But to ignore what people do with the elements of

> these chain shifts to construct social meaning is to turn a blind eye to an aspect of human competence that is at least as mind-blowing as the ability to maintain distance between one's vowels. (Eckert, 2008, p. 454)

Here, it is clear that she clings onto Labov's ontological distinction: We have to take both language and society into account to see the whole picture but, fundamentally, they are different things. She even reaffirms it in stating that it would not only be unwarranted to seek explanations for 'language internal' processes like chain shifts in the construction of social meaning, it is also 'futile and ridiculous'. Compare this statement to her 2012[21] account:

> Whereas the first two waves viewed the meaning of variation as incidental fallout from social space, the third wave views it as an essential feature of language. Variation constitutes a social semiotic system capable of expressing the full range of a community's social concerns. [...] The third wave locates ideology in language itself, in the construction of meaning, with potentially important consequences for linguistic theory more generally. (Eckert, 2012, pp. 94, 98)

Something has happened here: When she says that the meaning of variation has become 'an essential feature of language', then by implication it follows that the relatively rigid dichotomy between the *social patterning of linguistic factors* and other *social factors*, as found in orthodox Labovian variationism, is watered down considerably. Because if it is indeed assumed that social meaningfulness operates on both planes, independent from conscious awareness, the 'socially-meaningless/socially-meaningful' distinction underlying Labov's 'change from below/change from above' dichotomy (which finally underlies his 'language/society' distinction) no longer stands.

What might be the insinuated 'consequences for linguistic theory more generally'? The answer seems to depend on the importance of variation and how it is intertwined with language change. Labov distinguishes between stable variation and variation indicative of change. The former describes, for example, the use of stops or affricates for English /θ/ or /ð/. In many English-speaking speech communities, apical stops for

[21] Her 2012 paper, I have been told by an anonymous reviewer, circulated widely in North America in unpublished form for many years, hence it is more or less contemporary with the 2008 paper – which makes the occurring ambivalence even more interesting.

fricatives connote stigmatised working-class speech, and it has done so ever since the beginning of the 20th century (Labov, 2001, p. 90). Nothing has changed in this regard, and it has had no influence on language change whatsoever. In Labov's (ibid., pp. 83-85) view, stable variation therefore takes an intermediary position between language and society. It is part of the community grammar, but its role in the language faculty (Labov's own words) is negligible. If, however, variation leads to change (or is indicative thereof), this is no longer the case since it is commonly held that sound change affects the phonology of a language (e.g. Eckert & Labov, 2017).

Crucially, there is nothing in the above quote to suggest that Eckert restricts herself to stable variation. Nothing stops us from extrapolating the importance of meaning in variation to sound change in general. Put differently, this allows for the opportunity that even changes from below can be socially meaningful in one way or another. Thus, when she, at least by implication, advocates for the construction of meaning to be an important part of sound change (and thus language), she cries for a more sophisticated analysis of the social mechanisms behind changes from below, which are rather undertheorised in orthodox studies. Her assumption that social meaningfulness operates independently from conscious awareness seems to challenge heavily Labov's orthodox language/society distinction that rests on the power of social evaluation alone (see preceding chapter). If even changes from below can be socially meaningful, shouldn't one redraw the line between 'internal' and 'external' factors; 'language' and 'society'? The insinuated consequences for 'linguistic theory more generally' might then be that Eckert is perhaps no longer convinced that we can uphold Labov's belief in a narrow interface between language and society after all. If so, this seems like an ontological breach of Labovian variationism, and even though Eckert speaks of 'loosely-ordered waves' on her webpage[22], it is dubious to imply any continuity between two approaches that seem to be separated by an ontological chasm this fundamental.

Her critique becomes evident in the discussion of the female lead in sound changes (Eckert, 1989b, 2011). Gender, she argues, is complex social practice, and as such it

[22] https://web.stanford.edu/~eckert/thirdwave.html, last accessed on 23 February 2018.

needs to be teased apart if we want to understand women's leading position in changes from above and below. In her (1989b) paper, she argues that women are not able to acquire material capital as easily as men do, and therefore need to rely on symbolic capital – among other things their speech. Eckert concludes that 'If women are more constrained to display their personal and social qualities and memberships, we would expect these expressions to show up in their use of phonological variables' (ibid., p. 257). Labov (2001, pp. 275-276) has refuted similar claims on the grounds that, in this logic, we would expect less economic power to correlate with more conformity. In the Philadelphia Neighborhood Study, for instance, change from above originates in the lower middle class, with women in leading position. However, Labov could not find a higher differentiation of economic power between men and women here than in any other social class. In fact, many women have shown higher job mobility than men (ibid., p. 276). The power differential of the sexes is therefore not pivotal in explaining why it is particularly the second-highest status group that leads. As to change from below, in order for personal and social qualities to be reflected in women's use of phonological variables, this would require a superior sociolinguistic sensitivity to the social evaluation of language compared to men. As was outlined in the previous chapter, this is not an assumption Labov finds defensible, as in changes from below, speakers (men *and* women) are not consciously aware of their own altering pronunciation (ibid., p. 291).

To offer a way out of this dilemma, Eckert (2010, 2011) turns to sound symbolism (on which see also Silverstein, 1994). The idea of sound symbolism is at least as old as Plato's Cratylus (ca. 370 B.C.), in which Hermogenes adopts the position that is now known as a conventionalist: a name gains it meaning by pure convention. Socrates gets Hermogenes to agree that if a sentence can be false, the words within a sentence can likewise be false. Turning to Cratylus who maintains the naturalness of words, Socrates gets him to agree that the origin (and correctness) of a word depends on whether it correctly represents the essence of the thing denoted. Greek *rho*, for example, might stand for movement because of its trill, and we could thus decipher parts of the sense of Greek 'Phronesis' (wisdom) with recourse to the ability to perceive motion and flux. Similarly, Greek *iota* might stand for the delicate, and Greek

lambda for the smoothing. Phonetic targets, in this understanding, have meaning in which 'sound as sign becomes independently endowed with apparently denotationally relevant value *qua* signifier' (Silverstein, 1994, p. 42, italics in original). Eckert (2010) takes up this idea when she reconceives of social categories which have traditionally been studied under variationism (e.g. gender) as affective categories. For instance, she finds that two preadolescent girls in Detroit use fronted nuclei in /ay/ (e.g. *might*) and /o/ (e.g. *posh*) to portray childlike innocence, while more backed variants are reserved for adolescent topics (ibid., p. 76).

Females, according to Eckert (2011), make more use of the range of affective sound symbolism than boys. This has to do with how adolescents are socialised into what she calls a 'heterosexual market':

> [T]he girls in the crowd become increasingly flamboyant, engaging enthusiastically in the technology of beauty and personality and in constant drama in the continual making and breaking of friendships and couples. It is in the context of this heightened social activity that heightened styles come into play, involving new ways of moving, dressing, interacting, and talking. (ibid., p. 91)

Adolescent girls become more licensed than boys to be flamboyant (ibid., p. 87). Flamboyancy, by definition, is taking a norm and pushing it to the limits of the sphere of what is considered normal. The same mechanism applies to the phonetic realisation of phonological targets: The grade of fronting of backing are deviations of the sociolinguistic norm, and, by analogy, they establish a symbolic link to flamboyancy. Eckert perceives this to be intertwined with ongoing sound change, coinciding with heightened prosody (ibid., p. 91).

Labov (2001, chapter 15) has hypothesised that change from below begins with outliers, phonetic realisations which skew the distribution of a vowel along the internally-set trajectory of the change. Since, in Labov's view, children acquire their vernacular from their female caretakers (see preceding chapter), they perceive their caretaker's outliers as the regular norm and consequently centre their own production-mean at a more advanced position (see figure 7).

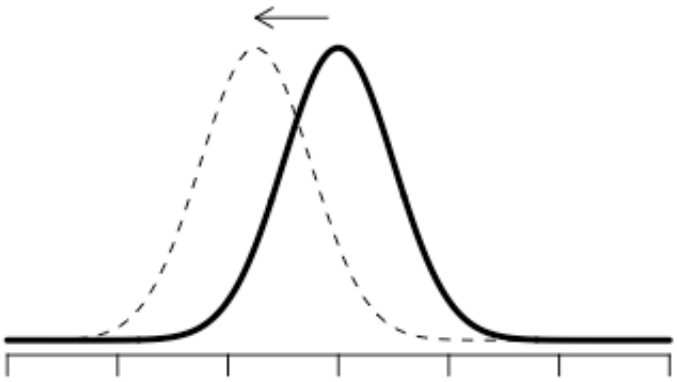

Figure 7: Fronting of a vowel, where the new F2 mean of the dashed distribution is centred at the leftward outlier of the old (bold) distribution.

As already outlined above, for Labov, this process can be accounted for with recourse to non-conformist behaviour in language socialisation. For Eckert (2011), the underlying mechanism guiding continuation of a change is 'social engineering'.[23] To count as an adolescent girl in the heterosexual market demands the ability to show dominance by making and breaking friendships or following the latest beauty trends (ibid., pp. 91, 95). All of this requires elaborated styles, of which advanced vowel quality plays an important part. For instance, when reporting on a quarrel with a peer, one of her interview participant's use of quotative 'go' is further advanced in the /ow/ fronting, an ongoing change in the California Vowel Shift, compared to other /ow/ tokens (ibid., p. 94).

Affect and social life, therefore, are vital in Eckert's account of the female lead. Her findings emphasise that speakers meaningfully perform their agency even in what Labov has conceptualised as 'change from below', that is, even if they are not consciously aware of it (see Eckert, 2016, pp. 77-79). After all, the interviewees in Eckert's studies add emphasis and share their affects for pragmatic purposes.

[23] It is not clear whether social engineering is a subtype of non-conformist behaviour as theorised by Labov. Both seem to have to do with affective performativity, but their exact relationship needs to be spelt out.

3.3. An ontological reorientation in Labov's own work?

In a way, Eckert's and similar claims have resonated with Labov's more recent work, in which he acknowledges that

> driving forces which may be responsible for the continuation, acceleration or completion of change […] involve the association of social attributes with the more advanced forms of a change in progress: local identity, membership in communities of practice, social class, age or gender. (Labov, 2010, p. 368)

At the same time, he acknowledges the possibility of cultural driving forces to explain large-scale phenomena like the Northern Cities Shift:

> Though the NCS remains below the level of social awareness, it is possible that its speakers have (if unconsciously) come to associate this sound shift, over the past few generations, with the political and cultural outlook inherited from the Yankee settlers. Those associations have evolved over time with various social and demographic changes, and especially with the realignment of the two major parties in the 1960s. As long as these ideological differences persist, speakers may be more likely to align their productions towards those around them who share their own identity and world-view. (Labov, 2010, p. 235)

This could and should be read as a cesura, an ontological reorientation, that marks a departure from the orthodox Labovian framework outlined above. For one, the autonomy of linguistic processes is weakened considerably when he acknowledges that even change from below can be meaningful in a broader sense. Social attributes can be associated with changes in progress regardless of conscious awareness and overt social commentary (Kristiansen, 2015 and Preston, 2018 are cases in point) – the decisive factors behind the orthodox language/society distinction (see preceding chapters). Therefore, changes from below cannot be accounted for by unconscious continuation of internal factors on account of analogous links between novel forms and non-conformity alone. Labov acknowledges this very subtly: in his later work, the nonconformity principle, which Labov (2001) proposes as the mechanism to describe how internal factors operate across vast geographical areas (see also preceding chapters), is treated as one possible mechanism among many (see Labov, 2010, chapter 9). Put differently, this means that it would be oversimplifying to posit a rigid *social patterning of linguistic factors* where the speech community is the 'material substratum' of language-internal mechanisms, as is done in the orthodox framework.

But neither Eckert nor Labov seem to follow through with this ontological reorientation. In Eckert and Labov (2017), they fall at the same hurdle Eckert is trying to overcome. They argue, very much inspired by Labov's earlier work, that since the attribution of social meaningfulness is located at a low level of abstraction, i.e. allophones rather than specific sounds, it cannot reach the linguistic deep structure (ibid., p. 481). They illustrate this in the discussion of near-mergers and chain shifts. Near-mergers are a phenomenon first outlined by Labov et al. (1972), which describes how speakers might be able to produce a phonetic distinction without being able to perceive it, or vice versa. This is seen as 'the clearest case of the divergence between social meaning and linguistic structure. When we try to direct speakers' attention to the difference, they cannot find it' (Eckert & Labov, 2017, p. 486). This passage, of course, ignores Eckert's (e.g. 2016) own claim that social meaningfulness is a complex phenomenon that extends beyond conscious awareness. Instead, it redraws the line between linguistic structure and social meaningfulness along availability to social commentary – faithful to the orthodox framework. Similarly, in chain shifts, it is possible that two adjacent targets are imbued with social meaning, but more complex chains 'do not seem to be objects of social perception' (Eckert & Labov, 2017, p. 489). If parts of the chain shift are imbued with social meaning, it is most likely to be parallel shifts, for instance the backing of short and mid vowels in the Northern Cities Chain Shift (ibid., p. 490). It is here where the authors allow for the opportunity of sound symbolism: '[S]ome parallel shifts may be a generalisation of a phonetic gesture that in itself has some potential meaning' (ibid., pp. 490-491), but this can never account for the whole phonological reorganisation in chain shifts. The unaware speech community is once again treated as a passive receptor – 'the material substratum' – of an independent linguistic change.

3.4. Towards the total linguistic fact

Admittedly, phenomena like chain shifts or near mergers are tricky to account for, and resorting to language-internal factors to explain these phenomena, as is done in Eckert and Labov (2017), seems like a safe haven for everyone who is not willing to concur with a major paradigm shift in the study of language. After all, this leaves the door

open for a certain automaticity of linguistic processes, as evidenced by Labov (2001, p. 499), who metaphorically equates sound change with seafaring:

> To the extent that general linguistic principles apply, they form the favorable undercurrent, or perhaps prevailing wind, for changes now in progress. Given enough social motivation or contrary linguistic pressures, retrograde movements can be set in motion, just as a boat may tack into the wind. When all other conditions on change are balanced or neutralized, structural principles might in themselves be a sufficient basis for continuation. This seems particularly true for the expansion of mergers, where social pressures and social consciousness are minimal.

But not every linguist has gone down the road of such a language-centred approach. Hymes's (1964b) *Language in Culture and Society*, for instance, prefers the study of the community over the study of linguistic codes, and thereby argues that linguistic investigation has to be part of a broader anthropological endeavour (Murray, 1998, p. 106). Granted, the title of the edited volume seems to suggest that language and culture and society can be easily divided, and indeed, many authors in the anthology adhere to pre-1960s views in anthropology that maintain a relatively strict distinction between language and society.[24] But language, according to Hymes, can be distinguished as a phenomenon for the sake of academic interests only 'so long as one remembers that on a theoretical plane the situation is different' (Hymes, 1964a, pp. xxvi-xxvii).

Of all sharp critics of a clearly distinguishable linguistic and social side, it was probably Malinowski at the frontline who rejected a belief in language-internal factors:

> Can we treat language as an independent subject of study? Is there a legitimate science of words alone, of phonetics, grammar, and lexicography? Or must all study of speaking lead to sociological investigation, to the treatment of linguistics as a branch of the general science of culture? [...] The distinction between language and speech, still supported by such writers as Bühler and Gardiner, but dating back to de Saussure and Wegener, will have to be dropped. (Malinowski, 1964 [1937], p. 63)

Ralph Pieris, for one, carried forward Malinowski's (1923) notion of phatic communion when he argues that language mirrors the situational demands of a given society (Murray, 1998, p. 54). However, many linguistic anthropologists have been rather doubtful of such a strong claim. Goodenough (1964 [1951], p. 188), for instance, argued that we should rather study language and society separately, and only once we

[24] I would like to thank an anonymous reviewer for this observation.

have understood both well enough, we should bring them together. Boas (1964 [1911], p. 17) saw in language 'a means to a clearer understanding of ethnological phenomena which in themselves have nothing to do with linguistic problems.' Others were more interested in social phenomena that cut across language, such as Levi-Strauss's (1964 [1963]) kinship systems. Thus, the theoretical consensus within linguistic anthropology has been fragmentary at best. What is shared in the different approaches, at the very least, is their scruples about a narrow interface between language and society by either placing emphasis on a broader culture-language interface, as in the case of Goodenough and Levi-Strauss; or by reducing '[a]ll forms of linguistic expression […] to a common psychological ground' (Sapir & Swadesh, 1964 [1946], p. 101), the path sought by Sapir.

The adherence to a narrow or broader interface between language and society has been captured by Dell Hymes in his theoretical assessment of sociolinguistics. He subdivided the field into three different types based on their treatment of language and society:

(1) ***the social as well as the linguistic***: addressing social issues which have a language component
(2) ***socially realistic linguistics***: basing linguistic investigation on real-society data
(3) ***socially constituted linguistics***: affirming that language is inherently social and society is inherently linguistic. (Hymes, 1974, p. 195, emphasis in original)

The first type captures endeavours within sociology of language which address socially relevant topics, concerning, for instance, the different language status in diglossic communities (Ferguson, 1972 [1959]). How language and society are related is treated as a subordinate matter because it is not deemed directly relevant for the issues in question. The second type is the label Labov (1972b, p. xvi) himself used when describing his own work – after all he has claimed from the outset that we need to include 'non-linguistic' data in our accounts of linguistic phenomena. As already established in the preceding chapters, orthodox Labovianism perceives a narrow interface between language and society, in which the 'social structure' is limited to social evaluation (e.g. Labov, 2001, p. 28). The third and last type describes the rejection of an ontological dichotomy of language and society, or at least it allows for a dialectical relationship between the two. In the recent volume *Sociolinguistics:*

Theoretical Debates edited by Coupland (2016c), the general tenor is that this conception underlies contemporary social-semiotic research which reconceives language as a pool of semiotic resources speakers are constantly engaging with (Coupland, 2016a, p. 437). Such a reconception is a means to tackle the 'structure-agency duality' (Bell, 2016, pp. 399-401): we can study social variation for what it reveals about the linguistic structure (*langue*), the path sought by Labov, but we need a systematic theory of *parole* that goes beyond stand-in social facts like social class or gender (see chapter 3.1) if we want to conceive of language as something that speakers 'do'.

Bell (2016) and Johnstone (2016) have argued in the same volume that Hymes' distinction is not a mere description of the status quo of sociolinguistics, but that it actually captures the path along which sociolinguistic metatheory has progressed. According to Johnstone (2016), more and more sociolinguistic studies have begun to theorise language as social and ideological practice; they have thus come closer to what Hymes classified as socially constituted linguistics. Bell (2016) adds that this has gone hand in hand with analysing the agency of speakers: style and indexicality have become pivotal in sociolinguistic analyses.

The theory of indexicality goes back to Silverstein (1976) and is grounded in a Peircian understanding of the linguistic sign. For Peirce (1932 [c. 1897-1910]), the sign is triadic and consists of a sign vehicle, an object and an interpretant. The sign vehicle is what 'does the signifying'. It relates to an object, the thing being signified. This relationship creates a new sign, the interpretant, which again can function as a sign vehicle, and so on.[25] This process Peirce calls 'semiosis'. To give an example, a molehill (the sign vehicle) signifies a mole (the object), and this relationship

[25] In fact, Peirce changed his position as to the interpretant. Given that he was a logician, he was interested, among other things, in the nature of knowledge, not so much in linguistic problems as Saussure. In his earlier accounts, Peirce allowed for infinite semiosis: if an interpretant can function as a new sign vehicle that again engages in semiosis, this suggests that 'an infinite chain of signs precedes any given sign' (Atkin, 2013). He dismissed this position in his later work, in which he began to see his sign theory 'as part of the logic of scientific discovery' (ibid.). Infinite semiosis gives way to a teleological understanding, where 'at the idealized end of inquiry we have a complete understanding of some object' (ibid.).

establishes an interpretant by virtue of which we are able to infer the presence of a mole when we see a molehill.

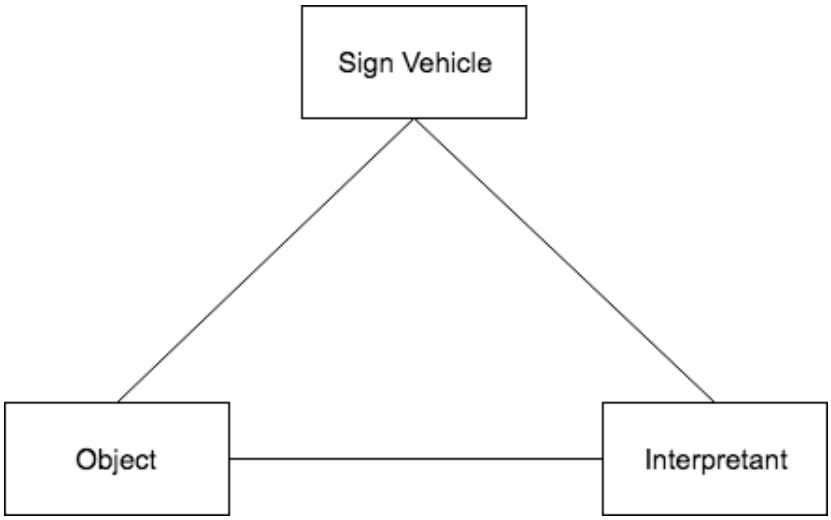

Figure 8: The triadic linguistic sign as theorised by Peirce

Silverstein's (1976) theory of indexicality is concerned with the relationship between the sign vehicle and the object. Sign vehicles, in accordance with Peirce (1932 [c. 1897-1910], pp. 136, 143-144), do not necessarily have one single fixed symbolic, indexical or iconic meaning, but can actually signify various things: The word *car*, for instance, can symbolically denote a transport vehicle. The pronunciation of the word, however, can index additional information about the speaker that does not necessarily add to the original referential meaning. A rhotic pronunciation in New York City might signify upper class speakers (Labov, 2006 [1966]). In this case, we could speak of a symbol and a 'non-referential index' (Silverstein, 1976, pp. 30-33) at the same time.

The way in which rhoticism indexes certain members of social categories is not congruent with a molehill indexing a mole. For Peirce (1932 [c. 1897], pp. 168-169), '[t]he index is physically connected with its object; they make an organic pair, but the interpreting mind has nothing to do with this connection'. This does not seem to hold for a sociolinguistic variable indexing social categories. By physical connection only, pre-consonantal and word-final /r/ would index certain speakers much like a dialectal feature might index speakers from a specific region. It is only with recourse to a social/cultural construal that we add the characteristic of class to the index. This

cultural construal, according to Silverstein (2003), is inherent in indexical semiosis, i.e. the production of new indices. That is, indexicality is always subject to ideological ('ethno-metapragmatic') modification, by which route a physical index can be transformed into a higher-order index. Rhoticism in New York City English might have started out as an index of certain speakers; it then was brought into second-order play by generalising the social class of the speakers; and it could again be brought into third-order play if decision makers decided that the standard language taught at schools should resemble the language spoken by posh speakers. Silverstein (ibid., p. 193) claims that, by means of such indexical orders, we can 'relate the micro-social to the macro-social frames of analysis of any sociolinguistic phenomenon', because they allow us to trace how, for instance, standard registers are the outcome of ordered indexical semiosis. Agha (2003) has elaborated on this with regard to the enregisterment of British Received Pronunciation (RP). He takes RP as the end-result of typifying speech with subsequent role-alignment with 'exemplary speakers' (ibid., p. 265). In the early 20th century, for instance, graduates of elite public schools were taken to be such exemplary speakers (ibid.). In the 1930s, RP connoted for the public the language spoken by British Army Officers (ibid., pp. 265-266). Later, in the 1970s, BBC announcers had a similar function (ibid., p. 266), and the public aligned their own speech behaviour with them. Typifying speech, then, is rather flexible: with changing conceptions of educated social class, exemplary speakers have changed. In all cases, however, a certain type of speech spoken by a professional group was brought into second-order play by generalising social class traits which were deemed desirable by speakers.

Arguably, then, we cannot fully account for structural entities like RP without analysing its inherent social components and how they are continuously enregistered in social practice – otherwise it would be hard to explain how such structural entities have come into being and how they are changed continuously. Accordingly, Silverstein (2003) argues that an exhaustive theory of language ought to be able to depict the dialectical character of language in which microsocial (interactional speech at the level of *parole*) and macrosocial aspects (phenomena at the level of *langue*, for instance RP) of linguistic practice are constantly mediated by ideology. Silverstein

(1985, p. 220) sees in this '[t]he total linguistic fact, the datum for a science of language', which comprises pragmatic, structural and ideological aspects.

The latter two Silverstein discusses with regard to the Modern English gender system. From a structural point of view, the possessive in a sentence like 'A passenger must have dropped *his* scarf' (ibid., p. 228, my emphasis) expresses the semantic property of a human referent. Crucially, the generic use of the masculine includes (used to include?) the possibility of both female and male referents. When feminist activists have argued that asymmetric gender markedness resembles sexism in everyday life too much, the structure-ideology intersection becomes evident. Speakers have taken a formal semantic property literally and, in numerous languages, have started to employ either gender-neutral terms (e.g. 'they') or the generic feminine 'she' in their fight for equality. This is grounded in the ideology that language 'both is and ought to be a *truthful* reference-guide to "reality"' (ibid., p. 251, emphasis in original). This kind of language 'correction' has gained considerable momentum because, at the same time, the usage or non-usage of gender-neutral pronouns became indexical of whether someone supports the feminist movement or not (ibid., pp. 251-253). As to the pragmatics-part of the total linguistic fact, many languages have indexical systems pointing to some kind of social reality regardless of the actual discourse content. Koasati, for instance, marks the gender of the speaker to signal who does the speaking and who is spoken to (ibid., pp. 232-234). In other languages, such indexes do not mark gender solely, as in Thai, where the choice of gendered participant pronominals ('I', 'You') patterns analogously to social status, 'such that female speaking to male is as lower status speaking to higher status' (ibid., p. 238). Thus, the pronoun usage corresponds to a large-scale social differential.

In summary, thus, the total linguistic fact acknowledges that pragmatic aspects of language are part of the linguistic structure. As such, the social sphere is inherent to language. The linguistic structure itself is subject to constant ideological modification, guided, as in the case of the Modern English gender system, by a literal interpretation of the structural pronoun system. This creates a new linguistic structure which again determines the 'use-value' of its possible modification (ibid., p. 256).

Hall-Lew (2013) has recently applied the total linguistic fact in her study of variation in the Sunset District in San Francisco. She has shown that San Franciscans present with a LOT-THOUGHT merger, initiated by the lowering and fronting of THOUGHT which is carried forward predominantly by Chinese Americans. Initially, Hall-Lew argues, raised THOUGHT was an unmarked means for San Franciscans to identify themselves with the East Coast. With the general spread of the low-back merger across the Western US, lowered THOUGHT became the regional norm. Raised THOUGHT, in turn, became a marked feature to distinguish San Franciscans from the broader Californian norm. When, from the 1990s onwards, ethnic Asians became the new population majority in the neighbourhood she studied, younger people began to see San Francisco as an integral part of the rest of California. As a consequence, raised THOUGHT lost its indexical meaning of localness, at least for the younger generation. This is a good example for the structure-ideology intersection outlined in the previous paragraphs: Racial tensions in the 1970s and 80s over local authenticity led to a reindexicalisation of a linguistic feature. Chinese Americans have carried forward the low-back merger, thereby aligning themselves with the broader Californian norm, while European Americans have resisted it because, for them, merge indexes a localness deviant from the original East Coast oriented norm. Hall-Lew (2017) discusses a similar reindexicalisation in her analysis of apparent-time style-shifting of /ow/ fronting during this critical period. Like the LOT-THOUGHT merger, /ow/ fronting is an ongoing change in the California Vowel Shift (see preceding chapter). In Hall-Lew's sample, one Chinese American participant born in 1970 uses significantly backer /ow/-nuclei when reading word lists out loud, which, in the Labovian sociolinguistic interview, is among the most formal styles (Labov, 2006 [1966], chapter 4). On the other hand, one Chinese American participant born in 1983 shows the opposite pattern, where significantly more fronted nuclei are produced in formal contexts. In the classical Labovian paradigm, such style shifting in formal contexts is indicative of correction from above (Labov, 1972b, p. 180). Hall-Lew retheorises it, following Silverstein (2003, p. 218), with recourse to 'register demand': As the underlying standard changed, so did the vowel realisations in formal contexts. In the 1970s, at the peak of transition between a White and Asian population majority, Asians did not formally participate in /ow/ fronting because it was not for them to utilise local norms yet. As

Chinese Americans gradually acquired local legitimacy, they were licensed to utilise what was once the local norm and carried it forward. With changing social surroundings, thus, the stylistic use-value of /ow/ fronting among Chinese Americans seems to have changed.

3.5. The limits of awareness

Much as Eckert has shown that unaware speech can be socially meaningful, Hall-Lew makes a strong case for reconceiving 'automatic convergence', another important aspect of Labovian change from below, as a social process that extends Labov's (2001) account of nonconformity in language socialisation. In the case of the Sunset District in San Francisco, it was the reindexicalisation of vowels as an index of ethnicity that renegotiated what counts as the local norm, and speakers, both European and Asian Americans, reacted to it in adjusting their own speech behaviour. Whether they do so consciously or unconsciously is a concern Hall-Lew raises but leaves open. What is important is who is constrained to use a certain variant at a certain point of time; whether consciously or unconsciously is a subordinate matter.

If we look outside the realm of phonology and sound change, we find many linguistic phenomena unconscious in nature where no one advocates for 'language-internal' explanations. Wasco-Wishram Chinookan in Columbia River, for instance, expresses graduation forms (augmentive → neutral → diminutive) by alternating consonants and sometimes vowels (Silverstein, 2001, p. 389). Augmentive forms are used in mocking and insulting speech, while diminutive forms are used in baby talk (ibid.). When the speakers' attention is drawn to what they have said, they are able to report the referential content, for instance that they have just insulted someone, but they are not consciously aware of how they achieved this with the help of consonant and vowel alternation. Silverstein argues that this is because native speakers do not have access to what Whorf (1964 [circa 1936]) called 'cryptotypes', only to 'phenotypes' on the surface (Silverstein, 2001, pp. 399-400). For Whorf, grammatical systems like graduation or gender can pattern along covert 'rapport-systems'. Speakers' awareness of such a system has 'an intuitive quality; we say that it is sensed rather than comprehended' (Whorf, 1964 [circa 1936], p. 131). For instance, much as speakers

'sense' the grammatical gender of an unknown object, they 'sense' the range of words to which the *un-* prefix can be added in English to produce derivatives such as 'unrelenting' or 'unbelievable' (ibid., pp. 132-133). English-speakers also 'sense' that words with *sl-* onsets denote something slippery (slide, sludge, slut; see Darian, 1979, p. 50).

For Whorf, the task of linguists is to investigate rapport systems for what they reveal about thought and cultures (Whorf, 1964 [circa 1936], p. 133). Silverstein (2001, pp. 400-401) extrapolates this *modus operandi* to the whole dimension of language when he urges us not to restrict social aspects of language use to metapragmatic awareness of certain linguistic features. According to Silverstein (2001, p. 401), the limits of metapragmatic awareness are 'definable, constrained, and semiotically-based'. How exactly they are definable, he leaves open. The important thing to notice is that even speech of which speakers are not consciously aware is not agentively unconstrained. Silverstein locates here the programme for social anthropology that, at least by implication, heavily challenges the ontological groundings of the orthodox Labovian paradigm:

> This, I want to lay before you, is the program for social anthropology, to understand the properties of ideologies and ethnotheories, that seem to guide participants in social systems, as part and parcel of those social systems, which must be seen as *meaningful*. (ibid., emphasis in original)

Which conclusions can we draw from this? For one, speech (aware and unaware alike) is guided by meaningful ideologies. This has been hammered home by Eckert and Hall-Lew when they argue that the sound changes they have studied can only be understood with recourse to the social systems in which they are embedded: in Eckert's case, socialisation of preadolescents into the heterosexual market; in Hall-Lew's case, racial debates of local authenticity. If we reconceive of linguistic variables as semiotic means to meaningfully engage with such social surroundings, both the 'change from above/below' and 'social/linguistic' dichotomies are on shaky ground, particularly because the latter hinges on the former. That is to say, just because we sometimes cannot account for speech behaviour with recourse to conscious agency, we are not forced to commit ourselves to the orthodox belief that speech is embedded in linguistic

processes that are ontologically distinct from social mechanisms. Granted, this notion is rather programmatic at this stage, but much recent critique of the Labovian paradigm seems to be grounded in a similar notion (see Coupland, 2016c). Variationists have only recently begun to challenge their own commitment to an ontologically distinct linguistic and social side in favour of analysing 'the properties of ideologies and ethnotheories, that seem to guide participants in social systems' (Silverstein, 2001, p. 401).

Silverstein has driven this point home when he argues that variation ought to be reconceived of as

> a movement of a sociological structure of repertoires of enregisterment – with or without explicitly standardized ones – distributed over a language community, always changing but always immanent in the variance of *parole* in which people perform their context-relevant identities via indexical semiosis. This will finally realize a dialectical and simultaneously socio- and historical linguistics conceptually adequate to succeed the would-be mechanism of "mindless" – really, unminded – Neogrammarian additive phonological change. (Silverstein, 2016, p. 63)

In this quote, Silverstein suggests than one should seek explanations for phonological change in 'repertoires of enregisterment' that are always subject to indexical semiosis. In such a view, indexical functionality is inherent to what has been traditionally classified as language-internal processes (ibid., p. 60). But one might ask: Where exactly are the 'context-relevant identities' performed in [-son] → [-voi] | _#, a phonological rule that is responsible for final obstruent devoicing in Russian, so that we get 'occasion': nom.sg. /ras/, but gen.sg. /raza/? It is hard to see how such a rule is a formal abstraction of 'people performing their context-relevant identities via indexical semiosis', and the implications of claiming this would be grave. It is commonly held that phonological change targets the grammar of a language or variety. In the case of Labov's (2006 [1966]) department story study, for instance, indexical semiosis that attributes social prestige to rhoticism introduces a new phonological rule to the grammar: /∅/ → [r] | _C, _#. But it seems like a strong claim to make that *all* phonological rules are the outcome of similar semiosis. For when one argues that every additive phonological change is explainable with recourse to indexical agency, by implication it follows that phonological grammar is a purely social product. This

would seem like a strong claim many linguists are not willing to accept. Still, Silverstein raises the reasonable concern that even phonological phenomena like final obstruent devoicing might have a social-indexical origin that has been papered over by phonologists. After all, in one way or another, one needs to account for why Old Dutch developed final obstruent devoicing considerably sooner than other West Germanic languages. If not for language-internal reasons, why else? At this point, it seems, the only reasonable answer proposed to this question is what it cannot be: an ontologically different entity exterior but connected to society – an 'unminded Neogrammarian additive phonological change'. In fact, such a radical view is not new at all: one could trace it at least to the 19th century. This may come as a surprise to many readers, but Jakob Grimm did not formulate what is now anachronistically known as Grimm's law as a rigorous law, he spoke of mere tendencies. What is more important is that he saw in these sound changes 'an early assertion of independence on the part of the ancestors of the German peoples' (Robins, 1997, p. 200) – a meaningful act of national identity that was later rebranded as a prime example for Neogrammarian change.

As we have seen in the discussion of third-wave variationism, and to a certain extent in Labov's own work, many sociolinguists are still coming to grips with whether they want to share such a view. That social meaning has become an important part of sound change (both above and below the level of consciousness) is something many sociolinguists probably agree on nowadays. What is still contentious, however, is where to draw the boundary between the social and the linguistic, and which one has primacy. The Northern Cities Chain Shift, for instance, was initiated by the unconditional raising of /æ/, which Labov (2010, pp. 113-118) traces back to a dialect convergence in the course of settlement processes in Western New York in the first half of the 19th century. The Canadian Shift and Pittsburgh Shift were both triggered by the low back merger (Labov, 2010, chapter 5). In the former case, the emergence of a *koine* is a social process and the resulting phonology essentially a 'linguistic by-product' which compensates for the initiated changes. In the latter cases, language-internal processes have primacy: indexical functionality might be attributed to the phonological compensation of the triggering event, but the triggering event itself

remains linguistic. In one case, 'the social' triggers 'the linguistic', in the other case 'the linguistic' triggers 'the social'. From this follows that the language/society distinction is no longer considered a one-way road, where a speech community can 'take up' a change in progress to attribute social meaning to it. 'Language-internal' factors, instead, are restricted to adjustments to 'a disequilibrium created by a triggering event' (Labov, 2010, pp. 369-370) – regardless if 'social' or 'linguistic' in origin. Language change, in such a view, is 'a long-range readjustment of the system to the effects of an original population disturbance – migration or invasion' (ibid., p. 370) – a sort of homecoming to Martinet's catastrophism.

3.6. Conclusion

I have shown that orthodox Labovian variationism is grounded in a 'narrow interface between language and society', in which 'the force of social evaluation' is confronted with an ontologically distinct Neogrammarian automaticity. Social agency, however, extends beyond overt social commentary and is operationalised twofold: either as the ability of the speech community to consciously initiate a change ('change from above' which is subject to overt social commentary), or the speech community's unconscious continuation of a change already existent in the linguistic structure ('change from below'). Crucially, even changes from below pattern along social lines. Labov makes do with this with recourse to unconscious nonconforming language socialisation. Paired with his conviction that children acquire their vernacular from their female caretakers, this allows him to account for generational sound change from below by operationalising the speech community as 'the material substratum' of an internal change. Neogrammarian change, in such a view, is embedded into and carried forward by the 'social structure'. This leaves him in an ambiguous position: on the one hand, he wants to uphold the autonomy of linguistic processes, on the other hand he acknowledges that these can only be explained with recourse to social processes.

Relatively young strands of variationism have recently raised awareness of the complexity of this socialisation. Eckert's (2010, 2011) studies exchange social macro-categories for affective categories, which calls into question that changes from below are socially 'meaningless' (in the orthodox paradigm, on account of the speech

community's inability to overtly comment on it). Hall-Lew has added to this that automatic continuation of a sound change, another flagship of orthodox Labovian change from below, can be accounted for with social-semiotic processes that surpass Labov's (2001, p. 516) nonconformity principle. Taken together, these studies operationalise social meaningfulness beyond the 'unconscious/conscious' dichotomy that underlies the 'narrow interface between language and society' in the orthodox Labovian framework. As a consequence, it has become increasingly difficult to draw a sharp line between social and linguistic aspects of language. Sociolinguists, including Labov in his later work, seem to have turned away from perceiving a narrow interface between language and society in virtue of a broader one.

Such a broader interface between language and society has been taken up by Silverstein's 'total linguistic fact', which has recently been applied in the study of variation and change. It seeks to reconceive of language as inherently pragmatic, ideological and structural. Admittedly, however, it raises at least as many issues as it manages to get rid of, and, as I have exemplified with third-wave variationism and Labov's own later work, sociolinguists are still coming to grips with the consequences that go hand in hand with reconceiving language in such a way. Some of the remaining questions include:

1. Where does social meaningfulness end and 'pure' language-internal factors begin?
2. Is social meaningfulness parasitic on language change or the other way around? Or both?
3. If social meaningfulness extends beyond consciousness, why is availability to overt commentary still a factor in maintaining the language/society distinction in Eckert and Labov (2017)?

Finally, what does it buy us to give up the neatness of a Neogrammarian regularity, grounded in linguistic structure alone, in favour of messy social-semiotic processes? Perhaps the obvious answer – that it buys us an escape from the *illusion* of regularity that our idealistic approach imposes, at least in part, on the reality of a complex diversity – is unsatisfactory, and even Labov (2001, p. 504) eventually acknowledges that '[a] certain linkage between social dimensions and linguistic traits is established as the result of an arbitrary and accidental concentration in history.'

In any case, what I aimed to show is that the moment Labov's notion of 'internal factors' is conceived of as a stand-in for socially meaningful processes, we witness an ontological reorientation within sociolinguistics that has important consequences for the field. All claims of continuity between so-called first-wave and third-wave variationist approaches paper over the fact that was has separated the two is not a mere methodological chasm but an ontological one.

CHAPTER 4: SCIENTIFIC REALISM AND LINGUISTICS: TWO STORIES OF SCIENTIFIC PROGRESS[26]

Discussions about scientific progress have, for a long time, been focussed exclusively on physics and chemistry, without making significant inroads into other scientific disciplines. This is despite the fact that philosophers of science such as Carl Gustav Hempel (1965b, p. 171) or Ernest Nagel (1961, p. 583) have made it clear that, from a philosophical perspective, the distinction between so-called hard and soft sciences is arbitrary. The only difference seems to be that, in the hard sciences, metatheoretical concerns became part of mainstream literature quite early compared to the soft sciences, in which they remained part of a minority discourse. It seems that this has started to change recently, as discussions of scientific progress now tend to go beyond the realm of particles (e.g. Alexandrova, 2016; Kincaid, 2008), inviting all kinds of scientists to incorporate philosophical notions of reference continuity, explanatory value, or objectivity into their own theorising.

Linguistics, it seems, has become part of the same trend. Nefdt (2016a, 2016b), for instance, has pondered continuity in generativism. He argues that even though we cannot infer ontological continuity from the history of generativism (minimalism has arguably little to do with the generativism of the 1960s), we can find continuity in its scientific modelling practice of *idealisation*. In the context of sociolinguistics, I have laid out how, in the past 50 years, the explanans of large-scale sound change has shifted from language internal factors to socially meaningful language behaviour that is logically prior to what Neogrammarians theorised as rigid 'sound laws' (Woschitz, 2019).

[26] A shortened version of the following chapter is currently under review with *Philosophy of Science* (Woschitz, under review).

The goal of this paper is to take these descriptions one step further and ask what they can tell us about progress in their respective fields. While Nefdt (2016a, 2016b, 2019) lays out modelling continuity in generativism quite convincingly, he is hesitant in passing judgement on the ontological breaches he discusses (which I describe in some detail in chapter 4.3 below).[27] If we want to ponder scientific progress, however, we need something to measure these ontological breaches against; something by virtue of which we are then able to say: "*Theory A* is better than *Theory B*, and *hence* the ontological breach", without ignoring the fact that what counts as better, truer or more real is, in part, theory-dependent (Kuhn, 1970 [1962]). In ways which will be laid out in the following two chapters, scientific realism has the potential to offer such a measure, but it comes with certain challenges. If these challenges are dealt with adequately, scientific realism can provide us with a theoretical toolkit that lets us argue, in the context of Nefdt (2016a, 2016b), that the dynamic turn in syntax did away with key assumptions of the traditional generativist framework *because* it was able to predict pronoun reference more successfully; or *because* treating the sentence as the pivotal studied subject was an unjustified restriction. In the context of Woschitz (2019), it enables us to state that sociolinguists have started problematising the autonomy of linguistics *because* they feel it is merely a heuristic stand-in for social processes at work.

My aim is to show that these seemingly diverse reasons can be broken down to philosophical criteria on the basis of which one could construct a yardstick of scientific progress. I shall discuss two of these criteria, both brought up regularly by philosophers of science and scientists themselves, which by no means exhaust the list: *explanatory power/value*, where I shall draw on the philosophy of Hempel (1965a); and *the avoidance of value-laden presumptions*, where I shall draw on Nagel (1961) and on Alexandrova's (2016) reading of Nagel. When assessed against these two criteria, I argue that a theory's 'relational objectivity' (Nagel, 1961) becomes evident. The broad generalisation put forward is that if one theory has more relational

[27] Nefdt adheres to a form of ontic structural realism in his discussion (on which see Ladyman, 2016). Ontic structural realism is a relatively benign form of realism that posits that we cannot be realist about the entities posited by our theories, only about the mathematical structure the posited entities are embedded in.

objectivity than another, it makes sense to say that the former supersedes the latter. Such an approach ideally allows us to reconcile historical relativism with a non-naïve form of realism. In practice, things tend to be more complicated than that, which is why, to make my case, I shall discuss two examples where scholars have gradually eliminated questionable value-laden presumptions by attributing increasingly less explanatory value to entities posited in their respective theory: Chomskyan syntax and Labov's study of phonological change. In both cases, ontological reorientations in their work reveal much about their relational objectivity, and thus about progress within the field.

4.1. A short history of scientific realism

In a nutshell, scientific realists believe that the aim of science is to provide us with theories which, literally construed, can be accepted as true or approximately true (see e.g. Boyd, 2010). 'True' theories tell us something about how the world is structured, and how physical, chemical or other phenomena are subject to lawful behaviour that can be described with the help of scientific scrutiny. 'True' theories bring about a state of affairs in which students can, in good conscience, read a chemistry textbook and take the existence of molecules at face value. Our best theories point to the fact that our concept of molecules corresponds to mind-independent facts of the world, and the same holds for atoms in physics and chromosomes in biology.

From this, it is only a small step to account for why some theories are preferred over others in the school syllabus: the preferred ones are taken to correspond better to mind-independent facts than others. Newtonian mechanics, for instance, describes the falling of a stone with recourse to gravity, the physical force between any two objects with mass. Aristotle, on the other hand, held that a stone falls to the ground because it moves towards its natural place (Kuhn, 1970 [1962], p. 104). Fire behaves differently because of its natural place in the air. From today's point of view, this is an approach that does not reach the standard of scientific scrutiny because we no longer believe in entities having such intrinsic properties by which they act (see, perhaps quite surprisingly,

Chomsky, 2006, p. 7, chapter 1).[28] Similar examples from other fields are abundant. Before the Chemical Revolution in the 17th and 18th centuries, for instance, people believed that so-called phlogiston was released during combustion. When air was saturated with phlogiston, this impeded further combustion from happening. Chemists saw proof of this in the fact that candles are extinguished in an enclosed container – there is only so much phlogiston a finite amount of air can take. However, many inconsistencies arose with such a view. Metals, for instance, gain mass during combustion. This means that, under certain circumstances, phlogiston needed to have variable mass; sometimes negative, sometimes positive, dependent on the material in question (see e.g. Partington & Mckie, 1937). Lavoisier's account of combustion as a chemical reaction with oxygen dispenses with such irregularities. In his theory, combustion requires a gas with mass (oxygen). Burning metals combine with oxygen, which explains the mass increase. Therefore, when one sends one's child to school, they will learn about oxidation theory, not phlogiston.

The crux of the matter is that, in the late 18th century, the general belief was that phlogiston was *real* – corresponded to mind-independent facts – much as today's chemists believe in the actual reality of oxidation. Throughout ancient and medieval times, both in the West and the East, all material things, in line with Aristotle's view, were believed to be a combination of the four elements water, earth, air and fire (see Joseph, 2018, pp. 49-50). What convinced people to give these theories up? What gives us the epistemic authority to deem these theories less trustworthy than our state-of-the-art theories? To address this issue, scientific realists have begun scrutinising the characteristics in virtue of which some theories are better than others at explaining a given phenomenon. This is important if one wants to avoid conceiving of scientific realism as merely grounded in hindsight. While it is comparatively easy to point one's finger at errors and misconceptions in the past, when faced with contemporary theories, things get more complicated. Hardly anyone *deliberately* makes fallacious

[28] James McElvenny has pointed out to me that Newton's treatment of gravity is in its own way mysterious because it posits gravity as an irreducible force that acts at a distance. That is a strong metaphysical statement that Newton himself has been criticised for in his day. Einstein's general theory of relativity does away with this metaphysical baggage because it describes gravity not as a force but as a consequence of the curvature of spacetime.

assumptions, unless in highly controlled settings as is done in Quantum Mechanics to describe, for instance, wavefunction scarring (see Jansson, 2016).

Psillos (2000, p. 706) has identified three assumptions most schools of scientific realism share in their assessment of theories: the *metaphysical thesis*, which holds that '[t]he world has a definite and mind-independent structure'; the *semantic thesis*, which holds that '[s]cientific theories should be taken at face value'; and the *epistemic thesis*, which holds that entities posited by a theory really inhabit the world. Most discussions, it seems, are centred upon either metaphysical or semantic claims and often, these two are intertwined. If I, on a hike, pick up a stone and say, 'this is a stone', I a) imply that this stone constitutes a mind-independent fact (metaphysical), and b), that the word 'stone' in English accurately refers to this fact (semantic). Or to put it in a more sophisticated way, in so doing I claim that a term we use denotes truthfully an entity that exists mind-independently. A possible caveat is that, intuitively, this only pertains to what analytic philosophers call 'natural kinds'. Can the same logic apply when one talks about abstract terms such as *love*, *society* or *language*? Given that it is in the spirit of this paper not to jump the gun, I do not want to take social scientific explananda out of the equation too hastily. The Durkheimian term 'social facts' implies the mind-independence of what it denotes, the key word being *facts*; or, to give another example, no linguists have expressed doubts that there is a mind-independent shift in pronunciation of millions of people in the United States (see e.g. Labov, 2007), even though it is a social product and has nothing to do with 'natural laws' in the strict physical sense.

If we focus on the *semantic thesis* for the moment: as stated above, it holds that our scientific theories, including the terms within our theories, should be taken at face value; or, in philosophical jargon, that they refer to a mind-independent state of affairs either truthfully or not. What is the source of the link between the word and the referent; a jargon term and the entity existing mind-independently? Typically, this link is established via a truth-value, which, under the traditional semantic view, is fixed in a sentence (see Putnam, 1981, pp. 32-33): *X is a stone* is true if and only if x belongs to the set of stones. Such a view is problematic, however, because 'truth-conditions of

whole sentences underdetermine reference' (Putnam, 1981, p. 35, emphasis omitted). This was shown in Putnam's (1981) famous permutation argument: we can switch the referents in the building blocks of a sentence while the truth value of the sentence remains the same, such that the truth values of the sentences *the cat is on the mat* and *the cat* is on the mat** are equivalent, even though *cat** picks out *cherries* and **mat* picks out *trees* (while *cat* and *mat* pick out their usual referents as expected). Truth-conditions of whole sentences, then, do not tell us anything about how reference works. But this is important, since one wants to take a word to truthfully (semantically) denote an actual mind-independent state of affairs – just as one wants whole statements of a scientific theory to do.

Philosophers have long engaged in heated debates over this issue. Putnam's permutation argument was a fatal argument against semantic descriptivism (on which see Michaelson & Reimer, 2019, section 2.1). Descriptivism is a view attributed to Frege and Russell which holds that speakers have, in their minds, a variety of descriptions such as 'the man who is currently president of the USA' and 'the man who was born in June 1946'. When speakers hear the name Donald Trump, they associate it with these descriptions and are therefore able to pick out the correct referent. Meaning, in this view, resides in the head, while 'referential success hinges on speakers attaching to each name in their repertoire some descriptive content *F* which uniquely singles out a specific object in the world' (Michaelson & Reimer, 2019, section 2.1, italics in original). An alternative proposed in the Kripke/Putnam causal view of reference (e.g. Putnam, 1975) holds that meaning lies instead in the referent and is chained to it via causal baptism. That is, reference is fixed externally, and meaning depends on a correspondence to a class of objects which shares likeness with this referent. For instance, at some point, someone decided to call H2O water[29] (even if that someone was not necessarily aware of its chemical formula), and from then on, people have used the term water to denote a class of objects which shares likeness with the referent (in this case, H_2O).

[29] Or perhaps something like *$h_2ék^weh_2$ in the case of Proto-Indo-European, but these details tend to be overlooked by people who want to make a philosophical point.

Others, such as Quine (1968), have contested this view by arguing that reference cannot be fixed externally that easily. Put simply, what guarantees that when someone points at the ocean and says "Water!" that a non-English speaking witness does not think the person means the movement of the waves or the colour of the ocean? This is the famous *gavagai* problem. Quine's point is that we cannot ontologically individuate an entity by ostension alone. We always need a background 'coordinate system' (p. 200) to regress into, something the interlocutors share and with recourse to which they are able to disambiguate "Water!". In a first instance, it is the language they share. In a second instance, it is the ontological system we acquire with language.[30] Since, so the argument goes, different ontologies come with different languages, the best we can do is translate a term unknown to us with reference to our own ontology. Or put differently, '[a] question of the form "What is an *F*?" can be answered only by recourse to a further term: "An *F* is a *G*". The answer makes only relative sense: sense relative to an uncritical acceptance of "*G*"' (Quine, 1968, p. 204, italics in original). Such a view relativises ontology because reference becomes dependent on something that is not set in stone but acquired in our upbringing. Interlocutors are treated as translators between different world-views; and ontology, Quine argues by quoting Kant, becomes part of transcendental metaphysics.

Quine's postulate of a background coordinate system has often been rejected as too radical – it would heavily threaten the *metaphysical thesis* stated above – but it has had considerable impact on competing theories. Putnam's (1982) internal realism, for instance, incorporates it by holding that there might be a mind-independent state of affairs (here he remains faithful to the *metaphysical thesis*), but that it is the scientific method that puts our thought in correspondence with it, not language, as Quine would have it (see Putnam, 1982, pp. 145, 162-163). With this change, a hardline approach to truth, in which a term can truthfully denote a mind-independent entity or not, gives way to a softened approach in which 'rational acceptability' (Putnam, 1981, p. 49) decides on the value of a theory. Quine's critique has evidently rubbed off on Putnam,

[30] Here, Quine seems to follow ideas commonly associated with the Sapir-Whorf-hypothesis, which, strictly speaking, is not one coherent theory but a collection of ideas that posit that our language at least inclines us to perceive a thing in a certain way (see Joseph, 2002, chapter 4).

along with many others, because correspondence between a jargon term and a mind-independent state of affairs is no longer something that is solely determined externally, but something that scientists co-construct in their theorising.

From this point of view, 'progress' could be conceived of as a process in which scientific theories incrementally get better at world-representation. But more often than not, theory changes go hand in hand with radical changes in world-representation, and the continuity one would expect under such a view is practically non-existent. In his famous *The Structure of Scientific Revolutions*, Kuhn (1970 [1962]) argued that we cannot infer ontological continuity (and therefore 'progress' in a streamlined sense) from the history of physics or chemistry. To return to the *water* example above: according to Putnam, the term *water* has always picked out H_2O, even when people had yet not found out about the chemical formula empirically. But in the 1750s, Kuhn (1990, pp. 310-312) convincingly argues, the referent of *water* picked out only liquid water. Only as late as in the 1780s did chemists begin to distinguish between states of aggregates (Kuhn, 1990, pp. 310-312). When people in the 1750s spoke of *water*, they denoted a subset of what *water* denotes today. What is more, before the Chemical Revolution, chemists distinguished between species more or less by 'what are now called the states of aggregation' (Kuhn, 1990, p. 311). Water was subsumed under other liquids on account of having the same aggregate, which is no longer the case. So, can we really say that *water* has always denoted H_2O? Kuhn's answer is no. While he acknowledges that Putnam's logic might still pertain to natural kinds (*water* in the 1750s still "kind of" picked out what it picks out nowadays), when analysing the historical development of terms like *planet*, *star*, *force* or *weight*, one can no longer speak of minor adjustments (Kuhn, 1957; 1990, p. 313). Aristotle's definition of *motion*, for instance, is characterised by two endpoints (Kuhn, 1990, p. 299): if change of quality happens between two contraries, such as *black* and *white*, Aristotle would speak of *motion* (Rosen, 2012, p. 65). If change happens between endpoints that are 'neither contraries nor intermediates but rather contradictories', such as *white and not white*, Aristotle would not classify that as *motion* (Rosen, 2012, p. 65). Are these criteria still relevant when Newton talks about *motion*? This time, Kuhn's answer would be a definite no. This is why we are so often puzzled when we study superseded

paradigms: their categories are not the same as ours, and even the entities posited by the theory are not congruent with ours.

Consequently, much as chemists nowadays think about *water* within different paradigms from those of pre-Chemical Revolution times, physics underwent a paradigm shift between Aristotle's *Physics* and Newton, and again when Einstein jettisoned some key assumptions of Newton in his theory of relativity (and yet again with the emergence of Quantum Theory). These competing paradigms (our background languages in Quine's terminology), Kuhn (1970 [1962], 1990) argues, are incommensurable, because they are not translatable into one another. In Kuhn's view, Quine's translator is therefore really a language learner (Kuhn, 1990, p. 300). When physics students nowadays study Aristotle, they have to acquire a whole lexicon of the categories Aristotle thought in. It is not enough for them to trace the putative development of *motion*, because he and Newton conceived of *motion* in such different terms. Even if two competing paradigms use the same term, there would never be an exact 1:1 correspondence, because with new lexicons, new referents are introduced (Kuhn, 1970 [1962], pp. 200-201). And, per Saussure's principle of contrast, when new referents (or more precisely, signifieds) are introduced to the lexicon, the whole coordinate system changes (Joseph, 2012, pp. 597-600).

4.2. Of superseding and superseded theories

This short history of scientific realism shows us two important things for the following discussion of scientific progress. One is that many philosophers of science want to hold that correct theories correspond to mind-independent facts, as per the *metaphysical thesis* (also subsumed under 'the correspondence theory of truth', see Marian, 2016). However, there is no God's-eye view, and we can only assess scientific claims about the world against the backdrop of our own scientific theorising. This is complicated by the fact that, as Kuhn argued, there is no ontological continuity in scientific theorising. Is this a nail in the coffin for belief in scientific progress?

Kuhn *did* believe in scientific progress; his criticism just happened to complicate the picture. What he rejected is progress in the form of 'evolution-toward-what-we-wish-

to-know' (Kuhn, 1970 [1962], p. 171), as if scientists incrementally worked towards ideal world-representation. But he did hold that scientific revolutions happen for a reason: a novel paradigm can for instance lead to better accuracy of prediction, an increased number of problems solved or better compatibility with other specialities when compared to the superseded paradigm (Kuhn, 1970 [1962], p. 206). From this perspective, nothing prohibits one from stating that Galileo's analysis of the pendulum movement improved on Aristotle's, or that Einstein's operationalisation of gravity allowed for a better account of light deflection than Newton's (see Kuhn, 1970 [1962], pp. 206-207). Kuhn's sense of progress is then an 'evolution-from-what-we-do-know' (Kuhn, 1970 [1962], p. 171). Some paradigms are better equipped to solve puzzles than others, but the puzzles are ultimately constrained by the paradigm one is working in. From this it follows that one can and should measure the success of theories against each other, not against an idealised notion of truth.

A new paradigm, for Kuhn (1970 [1962], pp. 23-24), does not gain ground because it is necessarily successful, but because it *promises* success. The *actual* scientific success can often take years, decades, sometimes centuries to manifest. But in times of scientific crisis, scientists need to choose among two or more competing theories rather spontaneously. It is hard for them to estimate the success potential of an emerging paradigm, so their decision often requires a leap of faith. This allowed scientists to commit to the wave theory of light, even though the corpuscular theory was initially more successful in resolving, for instance, polarisation effects (Kuhn, 1970 [1962], p. 154). This allowed them to commit to the heliocentric model, even though the geocentric view, meticulously discussed in Kuhn (1957) as the 'two-sphere universe', was very successful in predicting trajectories of stars and the sun.

The cost of giving up such theories with considerable predictive success is high. In modern times, a scientist renouncing a paradigm could lose their job, or not get invited to an interview in the first place. But the stakes are even higher. As alluded to above, scientific revolutions are born from scientific crises (Kuhn, 1970 [1962], p. 77), and these crises, such as the inability of the two-sphere model to smoothly account for planetary movement, are crucial in converting people from the old paradigm to the

new. A new paradigm could, for instance, promise to explain phenomena that, in the current paradigm, cannot be accounted for accurately enough (or, in more extreme cases, are treated axiomatically). In the example just mentioned, two-sphere theories – increasing theoretical complexity notwithstanding – never really achieved measurement accuracy of planetary movement. This led to the so-called Copernican revolution (Kuhn, 1957), whose heliocentric model outperforms the geocentricism of the two-sphere model on the grounds of its *explanatory power/value*: if we treat the earth as a planet that itself moves, the movement of other planets becomes less opaque. Such explanatory power is moreover often linked to the new paradigm outperforming the old by virtue of being less dependent on *value-laden presumptions*, examples of which can be found below.

Both notions are philosophically rather vague. Every description, even if taxonomic in nature, creates knowledge. The Bible, arguably, explains *everything*, from the creation of the universe to the moral understanding of humanity. But explanatory value and value-laden presumptions are still utilised and endorsed by philosophers and scientists alike; the following two chapters are cases in point. When it comes to explanatory value, Chomsky argued in the late 1950s that Neo-Bloomfieldian distributionalism had mere *descriptive* adequacy (see Chomsky, 1965, pp. 26-27; also Matthews, 1993, pp. 31-32), while his notion of a mental grammar shed light on the intricacies these descriptions are born from (and thus has *explanatory* adequacy). So-called third-wave variationists claim that what Labovian variationists do is merely *correlational* (they establish patterns like: working-class males are more likely to say *I'm walkin' down the street* instead of *I'm walking down the street*), while their own approach traces these large-scale patterns back to socially meaningful persona projection. In other words, correlating language variation and change with social macro-categories such as social class or gender does not *explain* the underlying dynamics that make them important. In this regard, the generative and third-wave variationist criticisms are similar: predecessors are credited for their meticulous description of the phenomenon in question, but now it is time to explain how the described regularities come about.

As regards philosophy, Hempel (1965a), for instance, argues that scientific progress is essentially a teleological process from descriptive to explanatory quality:

> Broadly speaking, the vocabulary of science has two basic functions: first, to permit an adequate *description* of the things and events that are the objects of scientific investigation; second, to permit the establishment of general laws or theories by means of which particular events may be *explained* and *predicted* and thus *scientifically understood*; for to understand a phenomenon scientifically is to show that it occurs in accordance with general laws or theoretical principles.
> In fact, granting some oversimplification, the development of a scientific discipline may often be said to proceed from an initial "natural history" stage, which primarily seeks to describe the phenomena under study and to establish simple empirical generalizations concerning them, to subsequent more and more "theoretical" stages, in which increasing emphasis is placed upon the attainment of comprehensive theoretical accounts of the empirical subject matter under investigation. (Hempel, 1965a, pp. 139-140, emphasis in original, footnote omitted)

For the reasons discussed in the preceding chapter, such a view seems idealistic and falls short of addressing either the problems circling Psillos' semantic thesis (p. 85 above), or the Kuhnian notion of theory-dependence in general. In the majority of cases, the 'general laws or theoretical principles' alluded to in the quote are projections from within theories themselves, rather than what Hempel calls phenomena. But the essence of the quote seems reasonable nonetheless: if an observer on earth predicts the sunrise from the crowing of a rooster, they have established a descriptive correlation, but that does not explain *why*, from their perspective, the sun seems to move (Craver, 2006, pp. 357-358). It is a mere starting point for in-depth reasoning, and one could come up with a range of hypotheses to try to account for the factors that could underlie the perceived movement of the sun. For instance, one could postulate that (1) that the sun tailors its movement to the activity of roosters, or (2) that what we perceive as a sunrise is the result of earth's eastward rotation on its axis, and that roosters tailor their crow to the presence or absence of sun exposure.

Few readers will take the first hypothesis seriously, and to account for their intuition, Nagel's (1961) notion of 'value assumptions' is useful.[31] Nagel's (1961, p. 582) account of scientific explanation is less idealistic than Hempel's, because it is not reliant on objective, theory-external truth. '[T]hough absolutely objective knowledge

[31] I am using this term interchangeably with *value-laden presumptions* (motivated by Alexandrova's 2016 use of the term).

of human affairs is unattainable', he argues, 'a "relational" form of objectivity called "relationism" can nevertheless be achieved'. A theory with relational objectivity should be able to state all its claims in the form of conditionals: if we operationalise X as Y, Z holds. What can then be criticised is the operationalisation of X as Y, as other operationalisations might be better or more accurate. To return to the examples above, hypothesis (1) hinges on roosters having extraterrestrial powers, while (2) does not require the assumption that what we perceive as the sun's movement is influenced by such small-scale factors. We have abundant reason to believe that the former operationalisation is incorrect, and hence is a value-laden presumption (perhaps motivated by a desire for this distant, mysterious, powerful object that is the sun to be under the control of creatures over whom we ourselves have control) that should be dropped.[32]

Notice that the notion of value-laden presumptions is necessarily intertwined with explanatory value. What validates or invalidates a value assumption is, in the spirit of scientific realism, in part dependent on a mind-independent reality, in this case the modern view that the sun does not move at all and is instead orbited by planets. For the following discussion of Chomsky and Labov, I will keep the notions of explanatory value and value-laden presumptions separate nonetheless, for heuristic purposes. Both scholars, it seems, have attributed less and less explanatory power to certain entities over the years, until they have been identified by some as value-laden presumptions that need to be challenged or dropped entirely. This led to ontological breaches/discontinuities typically associated with scientific revolutions. It does not matter that the history of Chomskyan linguistics is one of widening scope, whereas our case study of variationism is of narrowing scope. Both, in their own ways, tell the story of theories being superseded by competing approaches because they rely on

[32] Another, rather bizarre example showing that predictive success does not necessarily warrant accurate world-representation comes from econophysics, a branch of economics that applies models from physics to solve problems in economics: One can model an economy's income distribution by treating economic agents as if they were two gas molecules colliding (see Bradley & Thébault, in press, pp. 3-5). This model presupposes that all 'zero intelligence' agents carry all their money with them in cash. If they meet another agent, they both drop their entire belongings and then pick up a random amount. This process is then repeated. While no one seriously believes that this is how a *homo œconomicus* actually behaves, the result is accurate enough to depict an economy's income distribution.

debatable value assumptions that bring their validity limits (Rohrlich & Hardin, 1983) to the fore.

4.3. Chomsky: From a formal description of language to biolinguistics

A word of caution: Chomsky's approach is rational, hence non-empirical (though he would deny that, see e.g. Chomsky, 1993 [1981], p. 35; 1995, pp. 171-172; 2006, p. 168), and therefore essentially not falsifiable (Itkonen, 1978; Katz, 1981). Granted, Chomsky has claimed over the years that the structures posited by the generativist paradigm can be falsified by data from a previously understudied language, or indeed from a well-known language. The replacement of earlier phrase-structure grammars by the Principles and Parameters framework (discussed below) is a prominent example of such a falsification-driven development. But the posited structures are always inferred and never directly observable, and therefore potentially at odds with the epistemic thesis outlined in chapter 4.1 – we can never be sure if they actually describe how the brain works, or if they are merely part of a formalised description. This makes generativism rather hard to assess against the above-mentioned criteria of explanatory value and value-laden presumptions. I will try nonetheless, given that Chomsky himself, as alluded to above, grounded his criticism of structuralism and behaviourism in the fact the he assigned them mere *descriptive* adequacy. Generative Grammar, on the other hand, claims *explanatory* adequacy, because it ought to – theoretically – account for underlying principles of natural languages (see, for instance, Chomsky, 1993 [1981], p. 87). The distinction between descriptive and explanatory adequacy is laid out in Chomsky's *Aspects of the Theory of Syntax* (1965).

Chomsky's œuvre seems to be a good example of what Kuhn (1970 [1962], p. 184) referred to when he said that there is a continuum between heuristic and ontological models. More often than not, changes in the ontological commitments of generativism have been papered over by downgrading past accounts to heuristic approximations – as if all theoretical detours in the past 60 years logically lead to the present view of things. *Syntactic Structures* (2002 [1957]) started out as a formal description of language, exemplified largely by English, in part as a reaction to Hockett's statistical information theory. Radick (2016) shows that Hockett was also the principal target of

Chomsky's (1959) aggressive review of Skinner. At this stage, we read of no competence/performance dichotomy, no Language Acquisition Device, no Universal Grammar, let alone I-language. Only in *Aspects of the Theory of Syntax* (1965), and later in *Lectures on Government and Binding* (1993 [1981]) and in the *Minimalist Program* (1995) does he speak about language as biological endowment in its fully-fledged form. This is a first, relatively coarse-grained ontological reorientation: a formal description of language became a biological property of humans, and thus ontologically *real* (see Chomsky, 2006, chapter 7; Nefdt, 2019, pp. 178-179).

Other, more fine-grained ontological reorientations can be found in his treatment of so-called representational systems of grammar. In the so-called 'Standard Theory' developed in *Aspects*, Chomsky posits that every speaker possesses a mental linguistic capacity called "grammar" that allows them to generate language. This capacity "base-generates" a deep structure with the help of the syntactical component of grammar, and then derives from it a surface structure by various transformations.[33] This is typically exemplified by the following sentences: *John is easy to please* and *John is eager to please* have essentially identical surface structures, as both main clauses take infinitival complements. Their deep structures, however, are different, as *eager* takes a deep structure subject denoting the person who experiences the eagerness, whereas *easy* takes a clausal deep subject but undergoes subject-raising. In the course of transformations that map these deep structures to their surface structures, it just so happens that they have the same surface structure. Similar examples include passivisation, emphatic affirmatives, negation or interrogatives. The latter two, Chomsky (2002 [1957], pp. 64-65) derives from the same underlying structure, which he again takes as proof of the distinct reality of the two representational systems.

Over the years, the transformations between the representational systems have been refined in numerous ways. While in *Syntactic Structures*, Chomsky describes

[33] It should be noted that Chomsky has never put forward the idea that for every sentence in every language, a deep structure is wholly fixed by UG. Rather, according to Chomsky, some sort of innate formal schematism is universal and present in the mind of every new-born human, but a distinction needs to be made between universal and parochial schematisms. I would like to express my gratitude to Geoff Pullum for pointing this out to me.

grammatical functions such as passivisation and negation directly, in *Lectures on Government and Binding* he argues that grammatical functionality is subordinate to principles such as case and binding theory, which themselves can be reduced to the theory of government (Chomsky, 1993 [1981], pp. 7, 14, 44, 121). Transformations, or movement in general, become more abstract in nature, and, for Chomsky, more explanatory because they describe abstract regularities that seem to underlie each and every language (and are therefore part of Universal Grammar). At the same time, more importance is attributed to semantics. In the Standard Theory, for instance, syntax is treated as relatively autonomous, with semantics playing a subordinate role of interpreting these syntactic structures (Matthews, 1993, pp. 39-41). Many scholars deemed this a fallacious assumption, and after the so-called 'linguistics wars' in the 1960s and 70s (Harris, 1993), Chomsky developed as an answer the Extended Standard Theory, in which semantic interpretation is determined by multiple levels of representation, not just one, via the so-called projection principle and the assignment of theta-roles. Syntactic behaviour, for instance the ability or inability of a given verb to take a clausal complement (*I promised him [to leave]* is fine, but **I gave him [to leave]* is not), in this view, is lexically specified along with other morphophonological properties (Chomsky, 1993 [1981], p. 5). Deep and surface structures are then essentially treated as 'projections of lexical properties' (Chomsky, 1993 [1981], p. 39) – a considerable change of mind.[34]

In a further step, in the Minimalist Program (Chomsky, 1995), deep and surface structure are dropped, and with them the notion of government, which had been so carefully fleshed out in the *Lectures on Government and Binding*. The derivations – present since 1950s generativism – are instead entirely 'driven by morphological properties to which syntactic variation of languages is restricted' (Chomsky, 1995, p. 194).

This concludes our brief philosophical journey: first, language-specific transformations were abandoned in favour of more abstract principles; then these

[34] In the same vein, Chomsky exchanged the notion of deep structure with D-structure to acknowledge, 'behind a very thin veil', the criticism of generative semanticists (Harris, 1993, p. 304).

abstract principles were dropped in favour of morphological properties of the lexicon, and deep and surface structure with them. Taken at face value, it is hard to infer any ontological continuity from this development, and we could thus speak about them as examples of Kuhnian scientific revolutions. But many generativists spot continuity elsewhere (here, Nefdt, 2016a; 2016b gives a good overview). The main driving force behind this development, arguably, is Chomsky's conviction that humans are born with a language faculty that enables them, and only them (not animals), to create language (Chomsky, 2006, chapter 3). The argument outlined in *Language and Mind*, and similarly in numerous other publications by Chomsky, is as follows: certain intricacies in language use are never available for introspection by the native speaker. However, every speaker of English, independent of intelligence, is able to assign complex stress patterns to sentences they produce, without being aware of the regularities. They are not learned, therefore they must be innate. In the 1960s and 70s, this led Chomsky and other generativists to posit that people are born with an innate schematism that consists of, for instance, the principle of cyclic application (which underlies phonological stress-assignment) and the so-called A-over-A principle (which prohibits the extraction **London, I enjoyed my trip to*, but allows *My trip to London, I enjoyed*[35]) (Chomsky, 2006, pp. 39-40, 46). As principles like these proliferated, the sentiment grew stronger within linguistics that they would render language acquisition a trivial phenomenon (see Nefdt, 2019, p. 181). When they were later dropped in favour of lexically specified morphological properties, the complexity behind language acquisition grew so large that it would become hard to account for the speed and ease of language acquisition (Joseph, 2002, pp. 62-65).

Chomsky's answer to this impasse was that if there indeed exists a language faculty in the brain, its properties must be abstract and general enough so as to balance the complexity of natural languages with the ease of language acquisition. When one describes how stress is assigned to English sentences, for instance, the scope of one's claims is likely to be limited to English alone, and one therefore runs the risk of describing an idiosyncrasy rather than a property shared by all natural languages. If,

[35] I have been told that most native English speakers find the former sentence perfectly fine, which shows that grammaticality judgments made in syntactic theory are often peculiar to linguists themselves.

on the other hand, one wishes to uncover Universal Grammar as something that 'determine[s] the class of possible languages' (Chomsky, 2006, p. 155), the characteristics must become necessarily more general, so the logic goes. This of course papers over the fact that the principle of cyclic application and the A-over-A principle were in fact believed to be part of that very UG, as were deep structure and surface structure; and it would be inadequate to not mention the fact that the ontological commitments UG eventually boils down to have changed considerably in the last 60 years.[36] But in a way, these reorientations are justified by the fact – and Chomsky acknowledges this from the start – that different theories of grammar can be descriptively adequate. In theory, they can all account for the same corpus of data, and they can all predict ungrammaticality. The principle of cyclic application outlined in Chomsky and Halle (1968) still holds – is still descriptively adequate – for stress patterns in English, but it would be too specific a principle to hold for natural languages in general, hence it lacks explanatory adequacy and cannot be part of Universal Grammar. There must, therefore, be a principle underlying it, which *is* part of UG. This captures the essence of the Principles and Parameters framework developed in the *Lectures on Government and Binding* (1993 [1981]). Principles and Parameters holds that natural languages share certain abstract principles, and it is these abstract principles that need to be captured by UG. In this vein, the principle of cyclic application can be re-theorised as the principle that transformations apply in embedded domains before applying in superordinate domains – in phonological and syntactic environments alike. A prominent example of a parameter is the existence of so-called empty categories, one of which is *PRO*, a phonetically unrealised feature sharing syntactic properties of pronouns which allows us to resolve pronoun antecedents in sentences like *I expected to leave* as I_j *expected* PRO_j *to leave*.

How Chomsky justifies the existence of such empty categories can be inferred from the following quotes. Notice that he still adheres to the idea of a deep and surface structure at this stage.

[36] Whether a cyclic principle is part of UG or not has been a controversial topic within generative literature (see Pullum, 1992). One could make a case that it survived in Minimalism in the notion of 'phase', but only when acknowledging that it is not a phenomenon restricted to phonological form (PF). I would like to express my gratitude to Geoff Pullum for pointing this out to me.

> Note that the distribution of the empty categories, the differences among them and their similarities to and differences from overt elements are determined through the interaction of quite simple principles that belong to several different subtheories, in accordance with the modular approach to grammar that we are pursuing throughout. (Chomsky, 1993 [1981], p. 72)

> The range of phenomena – by no means exhausted in the preceding discussion – is fairly complex, but it follows, assuming the projection principle, from quite simple and for the most part independently-motivated principles of the interacting theories of bounding, government, binding, Case and control, a fact of some significance, I believe. (Chomsky, 1993 [1981], p. 85)

What is remarkable is that he actually seems to follow Kuhn (1970 [1962], p. 171) here in his *modus operandi*. When it comes to improving theories, his concept of 'progress' seems to be one of 'evolution-from-what-we-do-know', rather than one of 'evolution-toward-what-we-wish-to-know'. The empty categories he posits follow from 'quite simple' and 'independently-motivated' principles. If we operationalise UG as consisting of these independent principles, it may no longer seem so outlandish to add empty categories which build them into our theoretical apparatus.

It is here that Chomsky's epistemological tension comes to the fore. His ontological commitment to grammar being a biological endowment separate from other cognitive traits does not seem to fit the *modus operandi* underlying his theorising. His theorising broadly falls under a coherence theoretical approach of truth (Young, 2016), in which ontological commitments are not inferred from a mind-independent reality but from how well they fit with the applied theoretical apparatus. Such approaches to truth typically do not state an epistemological "endpoint" because they are at odds with the metaphysical thesis outlined in chapter 4.1. For Chomsky, however, the epistemological endpoint is set: Universal Grammar is a biolinguistic capacity, separate from other cognitive faculties. From this perspective, it becomes quite illuminating why the study of Chomsky's œuvre tells us a story of abstraction and, in the end, one of widening scope. As generativists became aware that many properties they had previously attributed to the autonomy of language(s) might actually be part of more general, abstract cognitive capacities (Chomsky, 2006, p. 183), the principles underlying each and every language (UG) have become broader and broader. In the end, it might all boil down to Merge, the capacity of natural languages to combine constituents to form larger structures. 'The simplest account of the "Great Leap

Forward" in the evolution of humans would be that the brain was rewired, perhaps by some slight mutation, to provide the operation Merge', Chomsky (2006, p. 184) says. What is left of elaborated notions of I-languages as developed in the Standard Theory and Extended Standard Theory is a mere linkage of sound and meaning, which takes us back to a Saussurean doctrine, and ultimately to the behaviourists who Chomsky was so eager to resist in the first place (see Joseph, 2002, p. 154).

4.4. Labov: From linguistic autonomy to sociolinguistic performativity

In many regards, William Labov can be regarded as a successor to the Neogrammarians, a late 19th century German school of linguists including, among others, Karl Brugmann (1849-1919), Hermann Osthoff (1847-1909) and Hermann Paul (1846-1921) (see Morpurgo Davies, 1998, chapter 9). He himself praised them as the 'heroes of the story' (Labov, 2006 [1966], p. 9) for their approach to the study of phonetic change, i.e. the study of changes in pronunciation. The Neogrammarians held that 'every sound change, inasmuch it occurs mechanically, takes place according to laws that admit no exception' (Osthoff & Brugmann, 1878, p. XIII). If the pronunciation of /a/ changes, it will do so in every word in which /a/ occurs, without exception. 'Mechanical' needs to be understood as the opposite of the 'organic' approach which they attributed to the work of August Schleicher (1821-1868), who conceived of language as a biological entity that evolves independently of its speakers (Morpurgo Davies, 1998, chapter 9). The Neogrammarians instead proposed that the emphasis should shift to the speakers who actually produce and change language on a daily basis; and that the explanation of language change needs to be sought in the change of the psychological 'sense of movement', or *Bewegungsgefühl* in Paul's (1920 [1880]) terminology. Only if the *Bewegungsgefühl* of e.g. the pronunciation of a vowel changes in many individuals at the same time can one speak of a change in the 'language custom' (*Sprachusus*). Readers familiar with the work of Labov will immediately recognise parallels between his and their theorising. In fact, Paul (1920 [1880]) even mentioned repeatedly that changes in the sense of movement can go entirely unnoticed, an important determinant in Labov's (1972b, 2006 [1966]) early work to distinguish between *change from above* and *change from below*.

These similarities notwithstanding, the modern paradigm of language variation and change (the Labovian school, nowadays often called 'first wave variationism') was essentially born out of a criticism of the above-quoted Hermann Paul, whose *Principien der Sprachgeschichte* 'at some stage counted as the Bible of the contemporary linguist' (Morpurgo Davies, 1998, p. 235). Weinreich et al. (1968) argue that Paul overemphasised the role of the individual:

> Jede sprachliche Schöpfung ist stets nur das Werk eines Individuums. Es können mehrere das gleiche schaffen, und das ist sehr häufig der Fall. Aber der Akt des Schaffens ist darum kein anderer und das Produkt kein anderes. Niemals schaffen mehrere Individuen etwas zusammen, mit vereinigten Kräften, mit verteilten Rollen. (Paul, 1920 [1880], p. 18)
>
> Every linguistic creation is always the work of an individual. Many can create the same, and this happens very often. But the act of creation, for this reason, is not different and the product not different either. Never do many individuals create something together with united forces or with allotted roles. (translation by me, the author)

Weinreich et al. (1968, pp. 107-108) argue, for instance, that, in this approach, Paul trivialises sociological issues concerning the relationship between the individual and the society they live in – particularly in relation to how a 'language custom'/*Sprachusus* comes about; and they further accuse him of woefully undertheorising the mechanisms underlying idiolectal change. It should be noted at this point that, to the linguistic historian, this critique seems rather anachronistic. Paul's focus on individuals as the driving forces behind language change is essentially a counterproposal to H. Steinthal's (1823-1899), and later Wilhelm Wundt's (1832-1920) *Völkerpsychologie*[37] (Klautke, 2013, pp. 30-32; Morpurgo Davies, 1998, pp. 247-250) – much as the whole Neogrammarian project was essentially an attempt to rid linguistics of romantic baggage and render it a modern, empirical science. But Weinreich et al. (1968, p. 125) saw in this an opportunity to propose a powerful alternative to the then-blossoming Chomskyan approach to grammar. A linguistic system, so the argument goes, always systematically correlates with non-linguistic factors such as social class, age or gender; and we must come to the conclusion that Chomsky's (1965, p. 3) 'ideal speaker-listener […] in a completely homogeneous

[37] For differences between their approaches to *Völkerpsychologie*, see Klautke (2013).

speech-community' is not only ideal but impossible (see Weinreich et al., 1968, pp. 101, 125). In every speech community one can establish social stratifications along lines of social class, gender, or age; where older people speak differently from the young, men differently from women, or the working class from the upper class. It is these social categories, contra Paul, that allow us to identify the driving forces behind language change. If the *Bewegungsgefühl* of a single individual changes, it is merely a token of a social type.[38]

With meticulous attention to detail, Labov studied the social stratification of language empirically. For instance, he soon established that when the collective pronunciation of a certain vowel changes without being noticed by the speech community, it is likely that upper-working class or lower-middle class women are leading the change (Labov, 2001, chapter 8). If a certain pronunciation is used by upper-class speakers, the lower middle class will likely hypercorrect its own pronunciation to match theirs, with women once again in the lead (Labov, 1972b, chapter 5). The former example is a case of 'change from below', the latter of 'change from above'. Soon, these empirical generalisations evolved into fully-fledged principles of linguistic change, to which Labov devoted an entire trilogy (1994, 2001, 2010).

Similarly to the case of Chomsky described in the preceding chapter, several important Labovian concepts have undergone considerable change to arrive at their current state – sometimes on account of inaccurate interpretations of Labov's work by his readers, at other times because Labov himself dramatically shifted the focus of his thinking (a detailed discussion can be found in Woschitz, 2019, sections 2 and 4). A case in point is his treatment of change from below. Ask a linguist who is only peripherally concerned with sociolinguistics to define it, and they are likely to say that it refers to changes initiated by the lower class. This, Labov (2006 [1966], p. 203) admits in

[38] In some regards, this logic seems to echo Wundt's criticism of Paul between the 1880s and the 1910s (see Klautke, 2013, pp. 30-32, 64-65, 71). Wundt held that a language is the product of a *Volk*, not something that is created individually (Klautke, 2013, chapter 2). A *Volk* is always more than the sum of its parts and a phenomenon Herbartian individual psychology (which Paul followed) cannot account for – hence the need for *Völkerpsychologie* (Klautke, 2013, pp. 64-65). This view is preserved in the sociology of Durkheim (1938 [1895]), who similarly held that 'social facts' cannot be explained solely by the behaviour of individual members of a society – they exist *sui generis*. Durkheim's sociological method underlies Labov's work down to the present day (see Figueroa, 1994, chapter 4).

retrospect, has been an egregious misreading all along, and that he should have used 'change from within' and 'without' the linguistic system instead (in the spirit of Labov, 2007). But in earlier work (Labov, 1972b, 2006 [1966]), whether a change in the linguistic system has its origin within or outside its own linguistic system played only a subordinate role. What mattered more as a distinguishing feature was the change's availability to social commentary and social awareness more generally: if speakers are not aware of their own changing pronunciation, Labov (1972b, p. 123) correspondingly spoke of change from 'below the level of conscious awareness'; if speakers are aware of their own changing pronunciation, Labov spoke of change from above the level of conscious awareness.

Recent critiques by the so-called third-wave (e.g. Eckert, 2016, pp. 77-79; Zimman, 2017, p. 366, footnote 1) have pointed out that the conscious/unconscious distinction does not adequately capture socially meaningful aspects of behaviour. Body language is a case in point: if I have a hunched posture, this could stem from a lack of self-esteem which I unconsciously project to the outside; and even if I have it because of orthopaedic reasons, other people could still pick up on it to form their opinion about me. Why should linguistic behaviour be any different? After all, the way I talk can involve my own desire to project an identity to the outside (for instance, that I am a Western, urban male); and even if not, others can still pick up on the way I talk to see if I fit a social stereotype. It should then not be too hard to introduce similar kinds of optional performativity into the above-mentioned distinction between change from above and below.

The stakes, however, are surprisingly high, not because Labov denies the importance of social meaningfulness, but because in the orthodox framework, the distinction between language and society, in other words between internal (Labov, 1994) and external (Labov, 2001) factors, largely hinges on the distinction between conscious and unconscious awareness (see Woschitz, 2019). If not for language-internal organising principles, so the logic goes, how can a complex reorganisation of the phonological space in a chain shift come about if speakers are not even aware of it? For example, it seems to be a pattern in Indo-European languages that when raising

vowels reach the point where they can go no higher (e.g. when a raising /æ/ has come to be pronounced as a tense [i]), they can diphthongise to continue their movement (Labov, 1994, pp. 120, 122, 248-249). The prime example of this is, of course, the English Great Vowel Shift, but we also find present-day varieties of English that have [miən] where others have [mæn] or [men] for *man*. Another tendency is that vowels positioned at the peripheral track of the vowel space become less open (Labov, 1994, p. 262): on average, we are much more likely to witness raising of long peripheral /æ/ towards [i], as in the above example, than a lowering and backing to long [ɑ], as in Southern British English *bath*.

Principles such as these do not seem to be attributable to social meaningfulness or performativity in the sense described above. They just 'happen' to a speech community undergoing multigenerational language change (Labov, 1994, pp. 264-265), by placing restrictions on which change in pronunciation is likely to happen, and in which direction it is likely to go (Labov, 1994, p. 115). Labov (2001, p. xv) accordingly treats the social structure as the 'material substratum' of language change, the latter being ontologically prior to what speakers do when they open their mouth to speak. Notice the parallel to Chomsky's justification of the innateness of certain linguistic principles discussed in the preceding chapter: the principle of cyclic application is too abstract for native speakers of English to be aware of, so the argument goes; thus, it needs to have an ontological existence separate from other, inductively learned parts of language.

It should be noted that the term 'material substratum' is rather ambiguous, and it allows for diametrically opposed readings. It could address Locke's substance/substratum distinction (which, it should be noted, is a matter of controversy itself; see Robinson, 2018, section 2.5). 'Properties – or, in Locke's terms qualities – must belong to something – cannot 'subsist… without something to support them'' (Robinson, 2018, section 2.5). In this logic, if one abstracts all properties away from an orange, such as its weight, its colour or its shape; there is still something left that functions as the carrier of these properties – the substratum. In the context of above, the 'material substratum of a language change' would then be what is left when one abstracts all

linguistic regularities such as the described restrictions on vowel-raising or diphthongisation away from speakers engaging in communication. 'Social structure', the substratum, functions as the carrier of language-internal processes, much like the substratum of an orange is the carrier of roughly 130g, a round shape and orange colour.

In a more colloquial reading, on the other hand, 'material substratum' can also denote 'something important from which something else develops, but that is not immediately obvious' (Cambridge Dictionary, retrieved February 22, 2019). This could be read as the opposite of the Lockean conception because it does not attribute to the substratum the role of a carrier or that of a mere recipient of properties. Instead, the substratum constitutes the observed properties. In the case of the above-described phonological restrictions, this would mean that the diphthongisation of [i] or the raising of peripheral [æ] is somehow the product of a speech community engaging in communication, rather than an ontologically prior restriction of language use. This is Labov's intended reading in the quote above.

Still, that he would use 'material substratum' to make his point is interesting because the epistemological tension between the two readings is also somewhat reflected in the contrast between his later and earlier work, and, to some extent, in his whole œuvre. In sum, what seems to have changed in Labov's theorising is how much in language change we can attribute to language-internal organising principles, and how much we can attribute to the social structure (the 'material substratum') in which it unfolds. In his earlier phase, Labov (1994, p. 3) argued that 'the two sets of factors - internal and external - are effectively independent of each other', and he attributed quite a lot to the former. All a linguistic community had to do is take up a change in vowel production (that came about because of linguistic pressures such as a phonemic merger, or 'in response to social motivations which are relatively obscure', Labov, 1972b, p. 123) and carry it along a pre-set path to its conclusion. In Labov (2001), this continuation is explained by the so-called 'nonconformity principle'. Children, in this view, interpret more advanced tokens of a vowel as informal/nonstandard speech, which they then reinterpret as not conforming to sociolinguistic norms (Labov, 2001, p. 513).

Therefore, juveniles from a social stratum more likely to resist these kinds of norms make comparatively greater use of such variants (Labov, 2001, p. 516); they are the 'leaders' of the change.

These 'abstract polarities' (Labov, 2001, p. 515) of standard/non-standard speech and conforming/non-conforming behaviour then allow us to account, at least in part, for how large-scale regularities in e.g. vowel raising come about:

> [I]t may be observed that the very generality of these abstract polarities makes it possible to conceive of how linguistic change may be driven in the same directions across thousands of miles in many separate communities. […] The general principles of chain shifting outlined in volume 1 give us one clue to the uniformity of these great regional developments. If this volume has added anything to our understanding of linguistic change, there must also be an explanation for the uniformity of socially motivated projection throughout these vast areas. The nonconformity hypothesis is submitted as a first step in that direction. (Labov, 2001, p. 515)[39]

In Labov's later phase, much more is attributed to less abstract socially meaningful/performative language behaviour, with the nonconformity principle being downgraded to one possible explanation among many:

> In one form or another, [driving forces which may be responsible for the continuation, acceleration or completion of change] involve the association of social attributes with the more advanced forms of a change in progress: local identity, membership in communities of practice, social class, age or gender. (Labov, 2010, p. 368)

In this passage, and in fact in the whole volume, the social structure is no longer treated as something in which language change is merely embedded. We witness instead an orientation away from a Lockean 'material substratum' to the colloquial reading mentioned above. The social structure is now in part constitutive of that change because advanced tokens carry performative meaning, often more locally relevant than an analogous equation of advanced tokens with nonconformity to sociolinguistic norms would suggest. And as third-wave variationists and socio-phoneticians continue to discover social performativity in small-scale features involved in sound change (see Eckert, 2010), less and less in language change can be captured under linguistic

[39] In this paper I have discussed two of these general principles of chain shifting: diphthongization and peripheral vowel raising.

structure ‘unfolding itself’ in a social structure. Or, conversely, linguistic structure becomes more and more restricted in its application domain. This invites us to look for the reasons of language change not in abstract principles but in the psychological reality of speakers, through which they have access to their sociolinguistic surroundings that cannot be separated from what linguists like to call ‘language’.

4.5. A similar kind of progress?

From 1965 on, Chomsky persuaded a critical mass of scholars to seek explanations for linguistic phenomena, including language acquisition, in a Universal Grammar located in the brain. As history unfolded, however, the representational systems needed to capture UG in a form that would account for all the syntactic structures of known languages became ever more complex. He adjusted his framework numerous times to rise to the challenge, but this has had important implications for the ontological commitment of his theory. Since the 1970s, fewer and fewer specific characteristics have been attributed to a linguistic genetic endowment, to a point where other scholars, such as Kirby, Smith, and Brighton (2004, p. 587), have started to attribute many properties previously attributed to UG to a ‘prior learning bias’ which seeks to explain intricacies of language entirely by general cognitive mechanisms.

I have argued that the theoretical reorientations in generativist theory can be understood as driven by the conviction that language is something biological and “natural”; that, at the end of the day, there is at least *something* in our brain that is distinctively linguistic and allows human beings alone to speak. But from a philosophical perspective, this is a strong assumption that is at odds with the applied methodology. If the preceding discussion of Kuhn and scientific realism has taught us anything, it is that mind-independent entities are projected in part out of our own theorising. But there is nothing in the *modus operandi* of Chomsky from which we can infer that the described regularities are distinctively linguistic, let alone a genetic endowment. Abstract regularities do exist, but we can never tell for sure if they belong to a distinct biolinguistic endowment or to other cognitive or social capacities. That the treatment of UG has become more and more general is then essentially an epistemological tension playing out in the pursuit by generativists to safeguard the

autonomy of linguistics. If one axiomatically believes in the existence of a biolinguistic entity, one must live with the fact that such an entity, if it exists at all, is so simple that others would call it trivial.

'Progress', to return to the scope of the paper, can then be found in the developing awareness over the last 60 years that less and less in language behaviour can be explained by UG, and that it should be treated as a last resort rather than an explanation for everything. To attribute too much explanatory importance to it, as was done in the 1960s and 70s, is nowadays considered a value-laden presumption in the sense outlined in chapter 4.2; an ontological commitment that academics have started giving up in favour of more general cognitive principles on the one hand, and social and cultural aspects on the other hand. Chomsky seems to be at ease with this:

> The quest for principled explanation faces daunting tasks. We can formulate the goals with reasonable clarity. We cannot, of course, know in advance how well they can be attained – that is, to what extent the states of the language faculty are attributable to general principles, possibly even holding for organisms generally. (Chomsky, 2006, p. 185)

He seems to be satisfied with the fact that his work of the previous 50 years, in which he tried so eagerly to bring linguistics to the level of a natural science, is now considered the harbinger of a modern cognitive science in which his linguistics has been swallowed up. Where some see in this the ultimate self-abolition of generativism, Chomsky sees biolinguistics brought to its logical conclusion. Both, in a way, are right in their assessment.

A similar kind of epistemological tension resolving itself seems to underlie the historical development of Labovian sociolinguistics. On the one hand, 'first-wave variationists' celebrate Neogrammarians for their analysis of sound change. On the other hand, however, early Labov has failed to live up to their conviction that each and every sound change is a psychological phenomenon. Large-scale regularities notwithstanding, the Neogrammarians never attributed driving forces of sound change to abstract principles like "if the vowel is tense, raise it". If anything, they resisted such claims on account of their empiricism: if something is not regular sound change, it is

the result of analogy. We can never go further than this if we want to remain faithful to the data. All other things that we extrapolate from the data are entirely speculative.

It just so happened that as descriptions of large-scale phonological changes proliferated, linguists began to abstract from them principles that were then taken to be ontologically prior to how speakers communicate in everyday life. Crucially, however, all proposed explanations of how internal factors come about – for instance, that, in many Indo-European languages, tense vowels seem to raise and diphthongise if need be – have proved inadequate. Laziness or carelessness, for instance, cannot account for the fact that some English varieties diphthongise tense [i] (see Labov, 2001, p. 25). Diphthongisation is generally treated as a change across two levels of phonological subsystems, which makes the pronunciation *more* complicated for speakers. Labov's loophole is to follow Meillet in his assumption that 'the sporadic character of language change can only be explained by correlations with the social structure of the speech community in which it takes place' (Labov, 2001, p. xv). What a speech community does is to break loose a change in a linguistic system which then adjusts itself to the disequilibrium (Labov, 2010, pp. 369-370). This allows Labov to have his cake and eat it too: on the one hand, he can maintain the ontological status of internal factors, on the other hand, he is able to foreground the importance of the speech community in bringing changes about.

As, over the years, increasingly more importance has been attributed to social meaningfulness and performativity associated with changes in progress, Labov's notion of internal factors has been constrained in the process. Remnants of internal factors can, for instance, be found in so-called near-mergers, which Eckert and Labov (2017, p. 486) describe as 'the clearest case of the divergence between social meaning and linguistic structure'. Near-mergers are when speakers cannot perceive a phonemic contrast but still produce it, or vice versa (Labov, Karen, & Miller, 1991; Labov et al., 1972). They are 'motivated by more abstract principles of change' because members in a speech community never direct their attention to 'the more abstract levels of phonological organization' (Eckert & Labov, 2017, pp. 467, 491). However, as mentioned in the previous chapters, sociolinguists have started to criticise theorising

agency or performativity along the lines of conscious awareness (see Eckert, 2016, pp. 77-79). Lack of awareness does not preclude social performativity, of which Nycz's (2018) study is a good example. She studied seven Canadians who moved to New York and had been living there for at least ten years before data collection. Speakers of Canadian English, unlike speakers of New York City English, typically present with the low-back merger, so that they cannot distinguish their vowel-pronunciation of *lot* and *thought*. Sophie, one of her interviewees, however, shows incipient unmerging without being aware of it (Nycz, 2018, p. 189): she shows a clear distinction between *lot* and *thought*, albeit not as clear as normally found in New York City English. She had been living in New York for 27 years and, incidentally, had been married to a New Yorker for almost two decades. For interviewees with Canadian spouses, unmerging is still present, but less distinct (Nycz, 2018, pp. 189, 198). The fact that Sophie's unmerging is more advanced is undoubtedly meaningful or performative. She could, for instance, express intimacy by aligning her low-back vowel production with her spouse's, regardless of whether she is consciously aware of it or not. Findings like these motivate Eckert (2019, p. 1) to argue quite radically that she 'would not be satisfied with the claim that a sound change was meaningless unless every effort had been made to prove otherwise'. We can see that the tables have turned: social meaning and linguistic structure are so hard to separate that what was once theorised as a 'material substratum' merely carrying forward language-internal processes is no longer accepted. This view is instead downgraded to a heuristic approximation of a phenomenon that, in reality, follows different rules that are driven by social meaningfulness.

It should be noted that third-wave variationists still seem to be unsure of how radically they want to follow through with this reorientation. One can find remnants of past ontological commitments even in Eckert's most recent work:

> Whatever its origins, whether from linguistic pressures ("change from below") or social pressures ("change from above"), sound change spreads by virtue of its incorporation into a semiotic landscape, as non-referential material is recruited into signs articulating social distinctions. (Eckert, 2019, p. 1)

It remains to be seen whether she will eventually do away with 'linguistic pressures' entirely, or whether she will at least conclude that we can attribute so little explanatory power to them that they are negligible when compared to social-semiotic aspects.

In conclusion, we can see interesting philosophical parallels between the Labovian and the Chomskyan paradigms: internal factors and UG were attributed much explanatory power in the late 20th century, but recently they have been treated as stand-ins for other processes at work (socially meaningful language behaviour and cognitive principles respectively). The explanatory value attributed to them has decreased as other things began 'doing the explaining'. Many scholars have started treating them as value-laden presumptions. As I have discussed in chapters 4.1 and 4.2, this is progress in the scientific realist and Kuhnian sense. Scientific progress in generativism is reflected in the fact that it did away with UG as an explanation for linguistic intricacies, and instead finds its new home in cognitive science. To some this appears to represent failure and abdication (or usurpation); but in fact, it has freed linguistics from the constraints of having to seek explanations for a variety of linguistic phenomena in one alleged entity in the brain, which no one to date has been able to locate on an fMRI scan. Scientific progress in the study of phonological change is reflected in the fact that the almost axiomatic assumption of internal factors unfolding themselves in a social structure is being overthrown.

Both generativism and sociolinguistics have increased their relational objectivity in the process, as epistemologically 'expensive' concepts have been questioned and re-theorised. That this has led, for many, to the self-abolition of generativism in the one case, and a less radical but still significant ontological reorientation in variationist sociolinguistics in the other, is a byproduct of disciplines resolving epistemological tensions.

4.6. Conclusion

I hope to have convinced the reader that philosophical scrutiny, and the philosophy of science more generally, allows us to penetrate all kinds of academic endeavours, "hard" and "soft", "natural" (or "biological", as generativists would have it) and

"social" alike. With our philosophical spectacles on, we can trace ontological, semantic or epistemological continuity, or the lack thereof, in an academic pursuit that could otherwise remain opaque. But this is not just a descriptive exercise by philosophers: if we conceive of the philosophy of science as a way to look at things, essentially a kind of take-a-step-back mentality, it provides us academics with a useful toolkit that allows us to address specific tensions in our fields, make explicit what is at stake when defending or adopting a position, and help resolving the issues at hand. All of this can contribute to the advancement of our discipline by providing it with a strong metatheoretical foundation.

In the spirit of a scientific realism that is faithful to Kuhn, we cannot measure the epistemic worth of a theory solely on the grounds of how well it corresponds to a mind-independent reality. We also need to consider how phenomena are in part projections of our own theorising. It is these projections that can be improved on; and whether theories have addressed specific epistemological tensions or not can then become a yardstick of scientific progress. Chomskyan syntax and Labovian study of phonological change were found to be cases where theoretical constructs (Universal Grammar or internal factors) have been attributed less explanatory value over the years. The described historical trajectories – from formal descriptions of language to biolinguistics, and from linguistic autonomy to sociolinguistic performativity respectively – have been told as stories in which scholars have sorted out epistemological tensions by identifying and addressing value-laden presumptions. In Chomsky's work, the axiomatic belief in a biolinguistic entity led to the trivialisation of his former claims; in Labov's work, social performativity challenged the questionable primacy of internal factors.

Joseph (2002, p. 134) has claimed that '[t]he crucial distinction to be drawn is between linguists who acknowledge their ideological stances and those who do not'. I would add to this that it is also the theories of those who acknowledge their stances that will survive in the longer run; and that it is they who do best in shedding light on the mind-independent reality that scientific realists are so eager to discover.

CHAPTER 5: FROM INTERNAL AND EXTERNAL FACTORS TO REGISTERS

Discussions in variationist sociolinguistics have, for a long time, followed closely the framework laid out in Weinreich et al. (1968), who capture as 'problems' various domains that they think should be addressed when studying language change empirically (table 1).

Table 1: The problems of language change as conceived by Weinreich et al. (1968) and how they have been classified under internal and external factors in subsequent work

		Internal	External
Constraint problem	What are general constraints of change?	✓	
Transition problem	How do linguistic innovations spread?	✓	(✓)*
Embedding problem	How are linguistic changes embedded in the linguistic and the social structure?	✓	✓
Evaluation problem	How are changes evaluated by the speech community, and what influence do such evaluation have on language change?	✓	✓
Actuation problem	What forces can initiate language change?	✓	✓

* The reason for putting this in brackets is that Weinreich et al. discuss the transition problem mainly in terms of how alternate forms are learned by speakers, how archaic and innovative forms coexist for a while, and how the innovative variant eventually 'wins'. They are not explicit about whether the language learner plays an important part in this trajectory, and primacy of internal factors is in no way precluded.

The constraint problem seeks to 'determine the set of possible changes and possible conditions for a change' (Weinreich et al., 1968, p. 183). Raising front vowels, for instance, tend do diphthongise because they cannot move to the front like raising back vowels – a pattern which is often explained by the 'asymmetry of the [oral speech] organs' (Martinet, 1952, pp. 26-27; see also Martinet, 1955). The transition problem asks how innovative linguistic forms spread through the speech community and eventually come to completion (Weinreich et al., 1968, pp. 184-185). The embedding problem concerns how a linguistic change manifests itself in the linguistic structure and in the social structure (Weinreich et al., 1968, pp. 185-186). The evaluation problem seeks to 'establish empirically the subjective correlates of the several layers

and variables in a heterogeneous structure' – i.e., in a speech community (Weinreich et al., 1968, p. 186). Finally, the actuation problem addresses possible stimuli of language change, which Weinreich et al. (1968, pp. 186-187) attribute to 'society' or 'the structure of language' – a position Labov (2010, chapter 5) remains faithful to in his discussion of triggering events.

One can infer from table 1 that, for most categories, both internal and external factors must be considered when studying language change. Indeed, Weinreich et al. (1968, p. 188) claim that

> Linguistic and social factors are closely interrelated in the development of language change. Explanations which are confined to one or the other aspect, no matter how well constructed, will fail to account for the rich body of regularities that can be observed in empirical studies of language behavior.

In subsequent work, however, the discussion of internal factors mainly falls under the constraints and the transition problems, while social factors fall under the evaluation problem (Labov, 1994, p. 2). Granted, the embedding and the actuation problems still comprise both aspects – as does the evaluation problem when maintenance or loss of meaning is concerned; for instance, when a language-internal change (a 'change from below') has led to the loss of a phonemic contrast. Regarding the embedding problem, however, internal factors have primacy, and the speech community is downgraded to a passive recipient of continuous Neogrammarian change – the 'material substratum of language change' (see chapters 3.1 and 4.4).

What justifies the orthodox Labovian paradigm to uphold a narrow interface between language and society is the conviction that social evaluations of sound change are too sporadic and never targeted at abstract changes in the phonological system (Eckert & Labov, 2017, see also chapter 3.1). Abstract changes in the phonological system must therefore have different driving forces – 'internal' principles. But to posit language change as the 'embedding' of such principles in a social structure implies ontological primacy of the former, and doing so re-instantiates a radical dichotomy which Weinreich et al. have set out to challenge in the first place. I locate here, following in the footsteps of Figueroa (1994), a paradox that has defined mainstream variationist

sociolinguistics from the beginning; a paradox currently being addressed in metatheoretical literature (Coupland, 2016c) and, implicitly, in the increasing popularity of third-wave variationism:

> From a historical perspective, variationist sociolinguists were eager to contest linguistic parochialism by introducing sociology to the study of language. But they have never fundamentally challenged the distinction between language and society, internal and external factors, in the first place.

Whether Eckert's notion of 'style', and third-wave variationism more generally, is such a fundamental challenge still needs to be fleshed out by third-wave variationists, as argued in chapter 3. For my part, I believe that it is, and I think that its philosophical underpinning waters down Weinreich et al.'s framework and the subsequent separation of internal and external factors considerably by depriving many problems stated in table 1 of their ontological status.

In the remainder of this thesis, I shall try to make explicit what I mean by this, and I shall draw out the implications of locating 'ideology in language itself' (Eckert, 2012, p. 98) by elaborating on the critique offered in Silverstein (2016, pp. 59-63, see chapter 3.5). To recapitulate, Silverstein (2016, p. 63) argues that one needs to theorise language variation and change as

> a movement of a sociological structure of repertoires of enregisterment – with or without explicitly standardized ones – distributed over a language community, always changing but always immanent in the variance of *parole* in which people perform their context-relevant identities via indexical semiosis. This will finally realize a dialectical and simultaneously socio- and historical linguistics conceptually adequate to succeed the would-be mechanism of "mindless" – really, unminded – Neogrammarian additive phonological change.

A lot seems to hinge in this critique on the notion of the 'register' (Agha, 2006), which I have alluded to in the preceding chapters of this thesis without having made explicit what is meant by it. Agha conceives of registers as '*reflexive models of language use* that are disseminated along identifiable trajectories in social space through communicative processes' (Agha, 2005, p. 38, emphasis in original). By reflexive is meant the indexical and performative nature of the register applied. For instance, deference indexicals such as French *vous* or German *Sie* evoke social inequality by

belittling one of the interlocutors and putting the other on a pedestal. Regardless of the actual social standing of the interlocutors, the utterance of one single *vous* or *Sie* assigns to the situation a social frame (in the sense of Goffman, 1974) that all interlocutors can decipher if they have access to the register in questions, in this case the register of deference. In other words,

> The *utterance* or use of a register's forms formulates a sketch of the social occasion of language use, indexing contextual features such as interlocutors' roles, relationships, and the type of social practice in which they are engaged. (Agha, 2006, p. 25, emphasis in original)

Typically, registers have been treated in the literature by scholars and non-scholars alike as 'metapragmatic classification[s] of discourse types' (Agha, 2006, p. 23). These discourse types can cover everything from deference systems, gender-specific grammatical codes (Haas, 1964 [1944]) to codes applied in professional contexts, such as academic jargon or 'legalese' (a derogatory term for jargon-heavy language used in legal contexts). When someone employs forms of legalese in a conversation, for instance, one could infer that the social occasion of language use is perhaps a legal argument, that the interlocutor has probably been trained in law, that their proficient usage of jargon expresses expertise, and so on.

Crucially, however, registers can cover a wide range of social occasions and are not necessarily restricted to forms of codified language use. They offer insight into how agents navigate through all kinds of social situations. Social agents can themselves create registers "on the fly" to do social work by recruiting signs into their repertoire (the case of *hayır* in chapter 2 is a good example of this). Current anthropological literature is therefore not so much interested in the taxonomic description of what kinds of registers exist in codified form but how registers (codified and uncodified) come into being in the first place and how they are circulated through what Silverstein in the above quote calls 'movement of a sociological structure of repertoires of enregisterment'. A newly-formed register can "catch on" and lead to the emergence of a social stereotype, which, in turn, makes the register in question more salient in the social landscape via 'sensorially perceivable signs' (Agha, 2006, p. 27). Because of this saliency, Lakota men can use grammaticalised female speech, British Asians [ʈ]

for /t/, North American girls HRT or Turkish grassroots *hayır* to do important illocutionary work, namely evoking motherliness, ethnic affiliation or the persona of a Valley Girl, or engaging in political resistance respectively (see chapter 2.1).

Such signs, 'semiotic artifacts' (Agha, 2006, p. 27), are not necessarily linguistic, and can involve clothing, bodily movement or other 'semiotically "readable" objects' (Agha, 2006, p. 27) as well. A good example of this is punks wearing safety pins as earrings, which can be construed as a statement against capitalist society and the obsession with expensive luxury goods. The point is that systematic usage of registers structures – gives a frame to – interactions in everyday life. Eckert's focus on style and personae follows the same logic, and she would gladly use the term register if it were not for its connotations 'of features associated with a specific setting or fixed social category' (Eckert, 2018, p. 146). She also acknowledges the importance of enregisterment (ibid.), which Agha defines as follows:

> A register exists as a bounded object only to a degree set by sociohistorical processes of *enregisterment*, processes by which the forms and values of a register become differentiable from the rest of the language (i.e., recognizable as distinct, linked to typifiable social personae or practices) for a given population of speakers. (Agha, 2006, p. 37, emphasis in orginal)

> Since the collection of individuals that we call a society is constantly changing in demographic composition (due to births, deaths, and migrations, for example) the *continuous historical existence* of a register depends upon mechanisms for the replication of its forms and values over changing populations (e.g., from generation to generation). The group of ''users'' of a register continuously changes and renews itself; hence the differentiable existence of the register, an awareness of its distinctive forms and values, must be communicable to new members of the group in order for the register to persist in some relatively constant way over time. (Agha, 2006, p. 27, emphasis in orginal)

The above quotes, I believe, are valuable resources to re-conceptualise the transition problem stated in Weinreich et al. (1968). 'Transition' suggests that languages change from state A to state B, and then the variable in question loses potency – the change has 'gone to completion' (e.g. Labov, 1994, p. 342). But changes are never complete when acknowledging that they continue doing social work as part of a register that, per the above quote, is 'differentiable from the rest of language'. My joint paper (chapter 2) is a powerful example of this: the indexical meaning of *hayır* 'good' has

been extremely robust over two millennia, and one could say that the restriction to religious indexicality has 'gone to completion' ever since *hayır* was borrowed into Turkish between the 8th and 10th centuries. But this could only happen by re-enregistering *hayır* 'good', over generations, through religious practice, thereby continually reinstating in the social landscape a contrast between religious cohorts using *hayır* and those using *yok/iyi* instead (see chapter 2.3.1). When, with the rise of the AKP, religious practice became associated with Anti-Kemalism, a new salient opposition emerged in the social landscape, and the register in which *hayır* 'good' has been employed changed its scope and illocutionary meaning: what once indexed pure religiousness has come to index a political ideology that grounds its claims in the former (see chapter 2.3). The meaning of *hayır* was therefore never fixed; the change never 'complete'. Its indexical associations remained constant for a good while, but they were never detached from social life.

The same logic can and has been applied to the context of phonological change. The English short-vowel system has been robust compared to the long-vowel system 'from the earliest records of the language' (Labov, 1994, p. 10). Yet, this only seemed to be an 'illusion of stability' (ibid.), as evidenced by English speakers of the Inland North of the USA who are undergoing a clockwise vowel rotation (the Northern Cities Shift, see chapters 3.1, 3.3 and 3.5). According to Labov (2010, pp. 116-118), a variety of settlement processes in Western New York in the first half of the 19th century led to a koine, a dialect arisen from contact of many dialects, which shows general tensing of short a. This koine then subsequently spread to the inland after the uplifting of the Erie Canal. Labov himself has theorised that speakers from the Inland North can utilise this vowel rotation as a linguistic register to distance themselves from the cultural South, in addition to already present cultural differences circling settlement history and voting behaviour (Labov, 2010, chapter 10, see also chapter 3.3):

> Though the NCS remains below the level of social awareness, it is possible that its speakers have (if unconsciously) come to associate this sound shift, over the past few generations, with the political and cultural outlook inherited from the Yankee settlers. Those associations have evolved over time with various social and demographic changes, and especially with the realignment of the two major parties in the 1960s. As long as these ideological differences persist, speakers may be more likely to align their

> productions towards those around them who share their own identity and world-view. (Labov, 2010, p. 235)

Labov, Rosenfelder, and Fruehwald (2013) provide a similar example. They trace in Philadelphia English a reversal of the fronting of the back upgliding vowels /aw/ and /ow/. Geographically, Philadelphia can be classified as the northernmost region of Southern Cities (Labov et al., 2013, p. 49). The retraction of /aw/ and /ow/ fronting is a sign of Philadelphia turning away from the Southern pattern to a typological Northern pattern:

> Dialect features that Philadelphia shares with the North and the Inland North show a linear incrementation across the century. Dialect features that differentiate Philadelphia from the North and North Midland and identify Philadelphia with the Southeastern region show an increase up to the middle of the twentieth century (for speakers born before 1940), and a symmetrical decline in favor of the Northern pattern thereafter. (Labov et al., 2013, p. 51)

Labov et al. (2013) explain this by the social evaluation associated with the variables in question. As the two variables have progressed in raising, they have become increasingly salient to the speech community. Data collected in the 1970s shows that speakers in Philadelphia had developed 'a moderate degree of social awareness' of /aw/ and /ow/ fronting (Labov et al., 2013, p. 52). They then started to retract from it – apparently starting with speakers born in the middle of the twentieth century (Labov et al., 2013, pp. 44-47) – because /aw/ and /ow/ fronting index Southernness, something the speech community deemed undesirable. Similarly to the above example, thus, the North-South cultural opposition has functioned as an important 'axis of differentiation' (Gal, 2016b) in the social landscape, and the two registers associated with it, which Labov et al. (2013) discuss in the context of dialect regions, have become important vehicles to signal ideological affiliation beyond the borders of the speech community.

Compare these examples to what Weinreich et al. (1968, p. 187) have to say:

> The advancement of the linguistic change to completion may be accompanied by a rise in the level of social awareness of the change and the establishment of a social stereotype. Eventually, the completion of the change and the shift of the variable to the status of a constant is accompanied by the loss of whatever social significance the feature possessed.

It would be unfaithful to Labov et al. (2013) to argue that they entirely disagree with this position. After all, social awareness of /aw/ and /ow/ fronting is an important determinant in their theorising, and the Northern dialect features they refer to are changes in progress that have not come to completion yet (and can, per the above quote, still 'rise in the level of social awareness'). It is, however, important to notice that, from the perspective of the register, the distinction between changes in progress and what Weinreich et al. refer to here as a 'constant' is a misleading one. As argued in chapter 3, it is misleading because it tries to restrict the social sphere to the optional commentary of a change already present in the system. When the change has gone to completion, the social sphere can "rest" until the next change is under way. But neither changes in progress nor changes that have gone to completion are ever completely devoid of social significance. Variables might be unmarked for a while, as was the case of *hayır* before the foundation of the Republic of Turkey. Even variables that gradually change in their phonetic implementation can be unmarked, as evidenced by numerously documented cases of change from below. But registers always define themselves *ex negativo*, and the minute an individual, a community of practice or a speech community perceives a difference between their and another's register, unmarked variables can become marked as part of a register speakers can align with or distance themselves from. In the above example, Philadelphians perceived a marked contrast between their /aw/ and /ow/ fronting and how "Northerners talk". They then got rid of these differences, and this allowed them to align themselves with whatever they associate with the North by "talking like a Northerner" (or, conversely, to distance themselves from the South by not talking like a Southerner). Other speech communities, of course, might spot different variables that set their registers apart, thus marking features that might have gone completely unnoticed in the Philadelphian context. 'Social significance', to return to the quote above, can then not be measured with recourse to one linguistic system or one register alone. Even if speakers within a single speech community do not attribute meaning to a variant, others might, and this can put pressure on even the most historically robust variants.

This is not to say that each and every register adjustment can be traced back to a conscious desire to portray or erase difference. The reasons for this are similar to the

reasons why Weinreich et al.'s evaluation problem is problematic from a theoretical point of view, but I shall return to this matter further below. The point I wish to make here is that one perceives difference only relatively to one's own register (or, as will be argued below, relatively to *ideas* about registers). This perception can be targeted at features one is not even necessarily aware of. Figure 9 depicts the vowel dispersions of one male speaker of Turkish who grew up in Turkey (red polygons with dashed lines), and one male and one female speaker of Turkish who both grew up in Austria (blue polygons with solid lines in facet A and B respectively). When Turkish respondents were asked to evaluate speech samples by those speakers, they could immediately tell that one of the male speakers comes from a diaspora background because there are "sharp differences in the way he pronounces his vowels" – a judgment they could not specify further (Woschitz, in preparation).

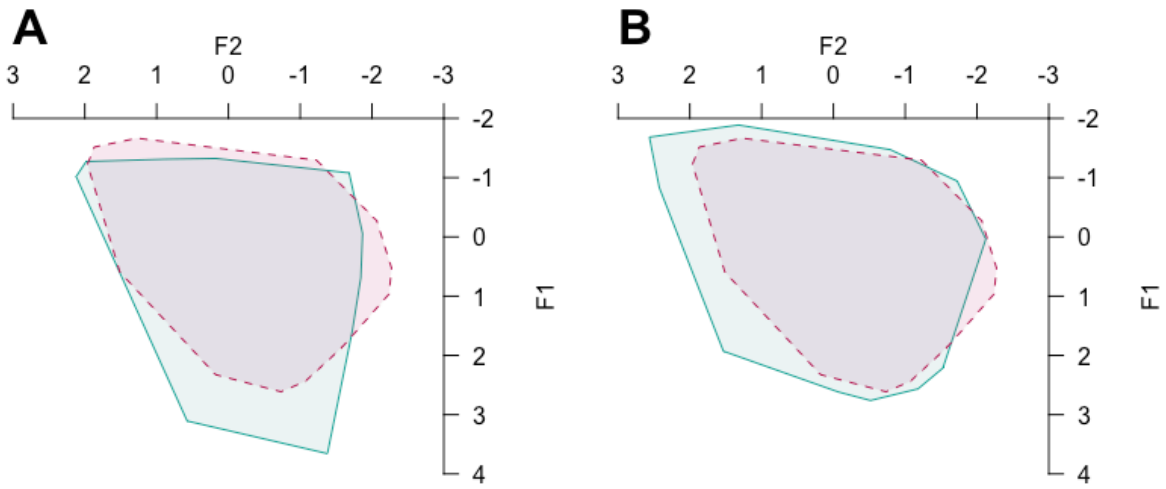

Figure 9: Normalised vowel-charts of Turkish speakers. In both facets, the red polygons with dashed lines show as a 'baseline' the vowel dispersion of the male speaker who grew up in Turkey. The blue polygon with solid lines shows the vowel dispersion of the male (facet A) and the female (facet B) speaker who both grew up in Austria. Data taken from Woschitz (in preparation).

One can infer from figure 9b that the male speaker who grew up in Turkey and the female speaker who grew up in Austria both present with a relatively centralised vowel system that is typical of Turkish phonology (Darcy & Krüger, 2012; Stangen, Kupisch, Ergün, & Zielke, 2015). The other male speaker (figure 9a) presents with a vowel system that makes more use of the lower phonetic space. Both of his low back vowels /o/ and /a/ show marked outliers towards the lower end of the spectrum, while his /ɯ/

seems to pattern more with high front vowels (figure 11). Also, his mean /a/ is significantly further back (p = .005) compared to the speaker who grew up in Turkey (figures 10a and 11a) – indicative of influence of Standard Austrian German phonology (Moosmüller, Schmid, & Brandstätter, 2015).

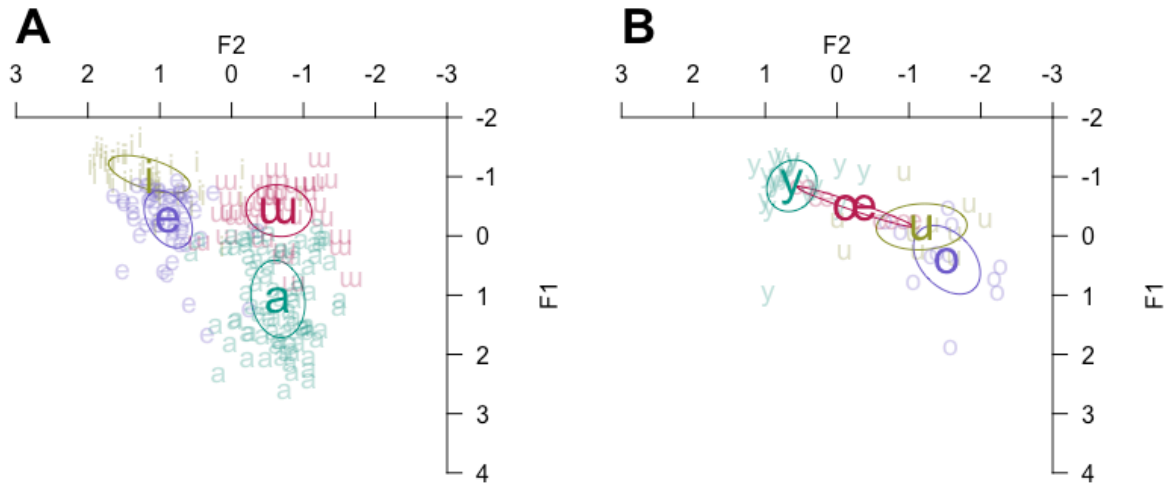

Figure 10: Unrounded (facet A) and rounded (facet B) vowels of the male speaker who grew up in Turkey (=red polygons with dashed lines in figure 9). Ellipses show 30% confidence interval. Data taken from Woschitz (in preparation).

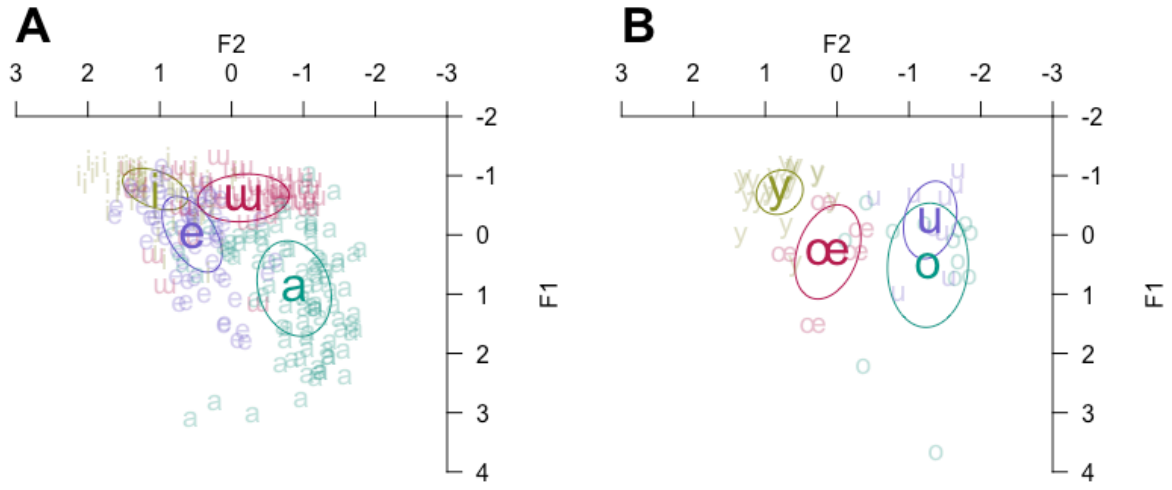

Figure 11: Unrounded (facet A) and rounded (facet B) vowels of the male speaker who grew up in Austria (=blue polygon with solid lines in Figure 9a). Ellipses show 30% confidence interval. Data taken from Woschitz (in preparation).

It is probably these deviations from Turkish Phonology that the respondents perceived when they made their judgment (though, of course, there may be others as well). The

diaspora male's pronunciation of back vowels differed markedly from their own, and this difference was construed by the respondents as an index of foreignness. Participants were thus able to identify a Diaspora Turkish variety which, to my knowledge, could not be identified by linguists on purely structural grounds (see Backus, 2012).

Such an explanation is, of course, complicated by the fact that speakers' ideas about their own register do not necessarily have to be congruent with what their register, in this case their vowel pronunciation, actually looks or sounds like. The Turkish respondents might not have compared the diaspora male's pronunciation to their own actual pronunciation but to *how they think their own pronunciation sounds like,* or *how they believe Standard Turkish should sound like*.

Applied linguists have long acknowledged as a historical fact that production and perception do not necessarily have to go together, and that inconsistencies between the two can be enhanced or papered over when speakers engage in ideological and political work (see Joseph, 2006). Serbian and Croatian, Austrian German and German spoken in Germany, or English and Scots are all cases in point where peoples' desire for difference can trump structural similarities. Conversely, if there is a strong desire for unity, not even structural differences that make varieties mutually unintelligible can stop it from being fulfilled – one only needs to think about Chinese. Once ideological disunities or unities like these have been established in the social landscape (e.g. Serbia and Croatia being construed as two different nations, thus speaking two distinct languages; or the belief in a shared Chinese nation, thus speaking the same language), they become powerful ideological constructs that put pressure not only on how one perceives oneself but also the speech of those who were 'othered' in the process. D'Onofrio (in preparation, p. 2) provides convincing experimental evidence of how ideological beliefs 'can bias memory, leading us to attribute utterances to speakers even when they did not occur'. In other words, if one has the expectation that group A, speaker B or even oneself talks like C, this expectation biases one's perception and papers over aspects that are inconsistent with it (Irvine & Gal, 2000 call this 'erasure'). As already mentioned above, this does not only pertain to registers on a national scale

but to more locally relevant registers as well. For instance, North American listeners were found to expect backing of TRAP when told that they listened to a Valley Girl (D'Onofrio, 2015). Conversely, 'hearing a backed TRAP led listeners to rate a speaker as more likely to be a Valley Girl than hearing the same speaker using fronter TRAPs' (D'Onofrio, in preparation, p. 3). Thus, people have specific ideas how others sound like. These ideas are re-instantiated by marked features, in this case TRAP fronting, whose presence or absence becomes pivotal in deciding whether a speaker belongs to one or the other category, in this case to Valley Girls or not.

Weinreich et al.'s evaluation problem does not seem to do justice to this complexity. They – or, rather, Labov in his subsequent work – locate in the production/perception asymmetry a linguistic automaticity that follows its own rules (see chapter 3.1). If a speech community cannot overtly comment on a change in progress, Labov takes this as evidence for the ontological autonomy of the latter. But it seems that in this kind of explanation, he massively underestimates the power of ideology.[40] Ideology is a driving force that transcends the ability of a single speaker or a group of speakers to put into words the social meaning of a changing phonetic implementation of a phoneme happening from a bird's-eye view. Where Labov conceives a dichotomy along availability to social commentary (or rather, a trichotomy along indicators, markers and stereotypes), one witnesses in reality a sliding scale where features can be variably marked or unmarked depending on the context and by whom they are employed. When a punk wears safety pins as earrings, it is hardly an unconscious act – it would be rather a painful one. But when it comes to clothing, body language or speech, the lines become increasingly blurred. If one does not give much about posh clothing and regularly buys sneakers instead of gents' shoes, one does not necessarily have the intent to make a socio-political statement. But others might read it as one and could capitalise on it; for instance, middle-aged upper middle-class men who want to portray what could be called 'ordered carelessness' and thus youth by wearing expensive shirts and jackets with casual, albeit overpriced sneakers. Their behaviour will reflect on one's own, because the register associated with the wearing of sneakers

[40] While Labov (2016) engages, for instance, with Gal's (2016a) criticism of his theorising of style, his responses rarely address paradigm constrains as discussed by Silverstein (2016).

has changed. The crux, then, lies in the fact that differentiation will happen if one wants it or not. This makes social evaluation, contra Labov, a multi-layered, intricate process that transcends the ability of a member of a speech community to say, "Sign A means B". Not everyone in the same community has access to the same interpretive frame, and no-one has the prerogative of interpretation when it comes to their own register, or 'style', as Eckert would have it.

As discussed in chapter 3.5, Labov (2010) argues, following Martinet (1955), that chain shifting is the long-term adjustment of a linguistic system to 'a disequilibrium created by a triggering event' (Labov, 2010, pp. 369-370). For Labov, these triggering events are not restricted to 'social' phenomena like large-scale migration streams, as Martinet held, but they can also include 'linguistic' triggering events such as phonemic mergers. In both cases, the changing phonetic implementations of a phoneme – or, in the case of a merger, the collapse of two phonetic implementations into one – threatens the equilibrium in the respective phonological subsystem (e.g. long vowels, upgliding diphthongs, ingliding diphthongs, etc.). For instance, when /ɛ/ starts to raise, the neighbouring variable /e/ would run the risk of becoming indistinguishable from it. It therefore moves in lockstep in order to maintain phonemic contrast. This, in turn, threatens the autonomy of /i/, which can then, according to the upper-exit principle (Labov, 1994, p. 602), change to the subsystem of diphthongs because it can raise no more. This, in turn, triggers nucleus-glide differentiation to maximise perceptual contrast, and so on. Once vowels have undergone this adjustment and have achieved a renewed equidistant position within their respective subsystem, one can say that the change has come to completion. From this perspective, it makes sense to conceive of a change as having a starting and an end point (Weinreich et al.'s transition problem). It even makes sense to ask the questions whether speakers pay attention to intermediary stages (Weinreich et al.'s evaluation problem). But the whole explanation seems to stand and fall with the principle of maximum dispersion. In *Principles of Linguistic Change: Cognitive and Cultural Factors*, Labov (2010, p. 92) calls it, rather parenthetically, a 'well-recognized principle', and much explanatory value is attributed to it in theorising sound change. Compare this to what Labov et al. (2013, p. 48) have to say with regard to developments in Philadelphian English:

> One can see phonological generalizations operating here, in the raising of /eyC/, /ay0/, and /aw/ and the general fronting of /ow/ and /aw/. […] But the explanatory force of such generalizations is limited. None of these movements can be accounted for by structural adjustments to maximize the functional economy of the system (Martinet 1955). It has been shown that such tendencies operate within subsystems V, Vy, Vw (Labov 1994:273–79). In the Vy system, the raising of /eyC/ is in the opposite direction from what a tendency to maximal dispersion would predict, bringing it closer and closer to /iyC/, and the raising of /ay0/ cannot be seen as a response to any such pressures. In the Vw system, the fronting of /ow/ brings it closer and closer to raised and fronted /aw/ so that in *Now I know*, *now* [nɛː˂o] may be distinguished from *know* [nɛː˂o] by only a small difference in the second formant of the nucleus. To understand the driving forces behind these two types of sound change we have to look elsewhere for a common property that would account for such differences in direction. (italics in original, footnote omitted)

They conclude that 'the long-term evolution of language is the result of […] micro-fluctuations in the social context, controlled by the structural imperatives that govern the production of speech in everyday life' (Labov et al., 2013, p. 61). Of course, a critical reader could argue at this point that, three years earlier, Labov had tried to sell the idea that the principle of maximum dispersion is exactly such a 'structural imperative', but now it is downgraded to a 'tendency'.[41] The same critical reader also probably observed that the vowel in figures 10 and 11 are by no means in an equidistant position, as, for both speakers, /e/ overlaps with /i/, leaving a gap to /a/ that could easily be filled in order to increase perceptual contrast. There are other issues concerning the principle of maximum dispersion which Labov leaves unaddressed, such as the fact that women often present with greater between-category dispersion than men (Diehl, Lindblom, Hoemeke, & Fahey, 1996), an example of which can be seen in figure 9b above; or that what seems to constrain vowel systems the most is not equidistance but whether they are learnable or not (Vaux & Samuels, 2015).

At this point in the discussion, it might make sense to take a step back and re-evaluate. The transition and embedding of a change seem to be, following the above quote, entirely driven by 'micro-fluctuations in the social context'. Where one could posit internal factors in this understanding, I do not know. Sure, a linguist could go and describe how Modern English upgliding vowels have changed in some varieties, but I

[41] Mapudungun, a language isolate spoken in Chile and Argentina, for instance, seems to be a language that does not conform to the principle of maximum dispersion (Sadowsky, 2019; Sadowsky, Painequeo, Salamanca, & Avelino, 2013).

am trying to make a philosophical point here: there is nothing in the embedding or transitioning of the above-described vowel changes in Philadelphia that *needs* to be accounted for by drawing on distinctly linguistic principles; or, conversely, that cannot be accounted for by the concept of enregisterment. The fact that one *might* witness structural tendencies to restore equidistance between phonemes or to distinguish between glides and nuclei is surely not enough to postulate primacy of 'internal factors' as opposed to 'external factors'.

What, then, are those 'structural imperatives that govern the production of speech in everyday life' alluded to in the above quote? The answer to this question leads us to Weinreich et al.'s constraint problem, the last stronghold of 'internal factors'. As discussed in chapter 3.1, Labov (1994) has established a handful of principles that seem to constrain language change, such that, in chain shifts, peripheral vowels become more close and non-peripheral vowels more open, or that peripheral high and mid vowels can diphthongise. What counts as peripheral can change from one language to another: for Germanic and Baltic languages, for instance, the peripheral/non-peripheral distinction is congruent with the tense/lax distinction, while, in Romance languages, only front unrounded and back rounded vowels are peripheral (Labov, 1994, p. 601). Still, Labov is convinced that peripherality is an underlying phonological ordering principle, and he is at peace with attributing such an 'abstract principle of language' to UG:

> In 1968, Weinreich, Labov, and Herzog outlined five problems to be solved in establishing the empirical foundations of a theory of language change. The first of these, the constraints problem, is to discover whatever constraints may exist on the form, direction, or structural character of linguistic changes. This definition of the constraints problem is not inconsistent with the search for a "universal grammar" that is the central thrust of formal linguistics today. The extension of this program to the study of language change would seek to establish a set of principles that define the concept "possible linguistic change" and that distinguish possible from impossible changes. At the heart of this universalistic approach is the idea that there are abstract principles of language present in all human beings, which define or permit certain types of language change and prohibit others: in other words, that there are some possible linguistic actions that human beings never perform, since they are incapable of doing so, and that changes that depend on such actions will never be found. (Labov, 1994, p. 115)

Whether drawing a parallel between constraints and UG helps Labov to make his case, I leave for the reader to decide. Roughly around the time *Principles of Linguistic Change: Internal Factors* (1994) was published, Chomsky had already adopted the Minimalist Program, which considerably simplified UG to a conjunction of a logical form (LF) and phonological/phonetic form (PF) mediated by a simplified form of syntax (see chapter 4.3). Besides, attributing principles of chain shifting to a UG is an unusual rationalist step for Labov, who usually considers himself to be a materialist (see Figueroa, 1994, chapter 4; Labov, 2016, pp. 595-597). The attested instances of principles of chain shifts in Labov (1994, p. 122) were overwhelmingly found in Indo-European languages, with occasional Sino-Tibetan or Finno-Ugric languages. Does this warrant speaking of 'abstract principles of language present in all human beings'? Chomsky would not see a problem with this, as he is convinced that one could, in theory, establish principles of UG by studying just one well-known language (see chapter 4.3); but for Labov, who has always been empirically leaned, this seems like a long shot.

These concerns notwithstanding, here are some constraints that could, following this logic, be attributed to UG:

> The last hundred years of evolution of the Philadelphia dialect displays some structural patterns that account for the directions of change: the generalization across parallel structures (nucleus-glide differentiation of back upgliding vowels, peripheral raising of long and ingliding vowels, the simplification of the short-*a* system). It has also shown coarticulatory effects that disrupt the unity of the phoneme (coronal onsets for /uw/; consonantal codas for /ey/; voiceless codas for /ay0/). (Labov et al., 2013, pp. 60-61, italics in original)

As regards the generalisation across parallel structures, to draw on generativist jargon, speakers seem to have an 'intuitive' understanding that there exist different phonological subsystems, such as ingliding diphthongs, upgliding diphthongs, long vowels, etc.; and they are regularly found to generalise over variables within such 'natural classes' (see Fruehwald, 2013, pp. 149-150; 2017, p. 35). In the case of Philadelphia, speakers recognise that /aw/ on /ow/ belong to the same subsystem (upgliding diphthongs), and therefore their phonetic implementation moves in lockstep. In layman's terms, speakers who pronounce *south* like [sɛʊθ] are also likely

to pronounce *loathe* as [lɛʊð], not [loʊð]. Natural classes, then, *constrain* changes because analogous treatment of variables within a subsystem is more likely than across subsystems. Given their identical glides, the vowels in *south* and *loathe* are produced very similarly in most English varieties. Their nucleus is different (in /ow/, it is more close and the tongue body is further back), but, all in all, the *Bewegungsgefühl* or 'sense of movement', to return to Paul's terminology (see chapter 4.4), is more similar than, say, that of /ow/ (*loath*) and /ay/ (*might*). Therefore, /aw/ and /ow/ offer themselves to being treated similarly, but /ow/ and /ay/, on average, do not.

Such generalisations are not incongruent with what the Neogrammarians had in mind when they talked about analogy (see Paul, 1920 [1880], chapter 5). Speakers, the Neogrammarians held, have a desire for a "logical" language system. After language change has wreaked havoc, individuals re-establish order by imposing onto the linguistic system a new set of relations (*Proportionengruppen* in Paul's terminology) to minimise the "damage" caused by a language change (Paul, 1920 [1880], chapter 10).[42] In variationist jargon, one could argue that analogy is an "external" intervention in the linguistic system to restore or uphold order. Such a view would attribute a good part of linguistic changes 'from within' (such as the 'generalization across parallel structures' in the quote above) to actual motivations 'from without' the linguistic system (to draw on the distinction offered in Labov, 2006 [1966], p. 203; 2007, p. 346). If one wishes to fully follow through with the Neogrammarian doctrine, one would have to attribute quite a lot to the individual psyche. Internal factors would then give way to the general psychological need for structure (something Saussure likewise acknowledged in his first Cours, see Joseph, 2000, p. 314), which, of course, transcends linguistic domains (Levi-Strauss, 1962 is a case in point).

Again, I am trying to make a philosophical point here: nothing in this logic necessitates an ontologically distinct reality of language-internal constraints that are possibly located in a UG. The simplification of the short-*a* system alluded to in the above quote

[42] Notice that Saussure himself, in his first *Course on General Linguistics*, held that analogy can happen unconsciously (Joseph, 2000, section 3) – a remark largely forgotten in orthodox variationist sociolinguistics that theorises language-internal and language-external change along the lines of social awareness (see chapters 3.1 and 3.5).

is no different; can likewise be accounted for by an external intervention into the linguistic system. Philadelphian English has had a complex system that tenses short a in closed syllables with nasals or voiceless fricatives in coda-position. Because there are many lexical exceptions to this, it has often been classified as a case of lexical diffusion (Labov, 1994, pp. 429-432; Labov et al., 2013, p. 55), and its continued existence has been dependent on parent-child transmission (Labov, 2007, pp. 353-356). Younger, educated Philadelphians have simplified this system to a system that tenses only before nasals, thus getting rid of markedly local Philadelphian phonology. As outlined above, one can describe this process as register-alignment with the North (by getting rid of markedly local features and features shared with Southern English). Here, the notion of 'internal factors' is restricted to how this register-alignment is *reflected* in the linguistic structure, and to how speakers systematically engage with the linguistic system to achieve their goal.

The next point on the list is the disruption of the phoneme by coarticulatory effects. As argued above, not every language change is a case of register alignment; often, as meticulously studied by third-wave variationists, speakers themselves create new registers to do social work. Salient features of their speech might bias them in a certain direction; might *constrain* them in their choice of register form they utilise in the process. For instance, coronal fronting is a general coarticulatory effect to reduce distance between places of articulation. In most English varieties, *too* [tʰuʊ] will be pronounced as something like [tʰʉʊ], thus minimising the distance between the tip of the tongue touching the alveolar ridge in /t/ and the back of the tongue approaching the velum in /u/. In most North American varieties, the contrast will be even bigger, so that *too* will be pronounced as something like [tʰiʊ] (Labov et al., 2013, p. 50). In this case, fronting after coronal stops has been 'phonologicalised' (see Fruehwald, 2013). This means that speakers have added to their 'grammar' (very much in the Chomskyan sense) a phonological rule (or, if one prefers constraints-based phonology, a re-ordering of constraints) that states that whenever the Vw natural class is preceded by a coronal consonant, the tongue moves to the front of the oral cavity more than usual.

In Philadelphia, this rule is barred when Vw is followed by the lateral approximant /l/ (Fruehwald, 2013, p. 107). Philadelphians often vocalise or reduce /l/ in syllable codas to a velar approximant [ɰ], sometimes accompanied by velar frication (Fruehwald, 2013, p. 106). This results in glide-deletion and compensatory lengthening, so that *tool* [tʰuʊɬ] is pronounced something like [tʰuːɰ]. Given that only the nucleus, more specifically the first mora, moves in the above examples (the glide [ʊ] remains constant), fronting is no longer possible in this case because the nucleus and the glide have collapsed into a long vowel that occupies both moras (Fruehwald, 2013, p. 107). In other words, liquid vocalisation in coda-position has alienated the Vw natural class from Vwl, which becomes a phonological category of its own, thereby constraining quite literally how speakers move their speech organs in certain phonological environments.

In other varieties, such as Southern English, Vw fronting is not barred by /l/ in coda-position, such that *tool* [tʰuʊɬ] is pronounced like [tʰiʊɬ] (Labov, Ash, & Boberg, 2006, pp. 152-155). This is a salient feature in the North-American social landscape, indexing Southernness. Of course, as explained above, this saliency is grounded in its marked difference from other registers, such as Philadelphia English or Northern varieties that do not front before /l/. But, as it stands, Philadelphian English and Southern English seem to have different constraints within their respective system, such that we can say that, in Philadelphian English, Vw → V: | _l (see Fruehwald, 2013, p. 107), while, in Southern English (redundantly), Vw → Vw | _l.

The crucial thing is that, at this point, the discussion has arrived at the level of a synchronic comparison of grammars, side-stepping the question how phonological rule formation, reordering, simplification, elision, etc. spreads through the social landscape, and why phonological innovations come about in the first place. /l/ reduction in Philadelphia can explain why the Vwl class does not participate in Vw fronting, but it does not account for why Vw fronting happens. It is also not clear why the South has phonologicalised coronal fronting entirely while the North did not before /l/. All we can do is describe synchronic states of linguistic systems that differ in these

regards, and deduce from them different constraints governing, at a certain point of time, 'the production of speech in everyday life' (Labov et al., 2013, p. 61).

Silverstein (2016, p. 63) bemoans this reductionism to synchronic states of grammar, not only because it provides little insight into how language is used by social agents to do ideological work, but also because it fails to overcome the synchrony/diachrony paradox that has accompanied modern linguistics from the start (see also Silverstein, 2003). On the one hand, most linguists will agree that languages are in constant flux. On the other hand, however, descriptions of languages or grammars are overwhelmingly snapshots in time. Language change is largely studied in the form of a sequencing of synchronic stages without much insight into how changes between stages have come about. Within Optimality Theory (OT), for instance, it is not agreed upon whether language change is the initiator or the result of a re-ordering of constraints – all one can tell for sure is that a language that underwent change has had two different orders of constraints at two points in history (see Holt, 2003).

Some phonologists working in OT argue that a language might have an unfixed order of constraints within its grammar that makes two 'candidates' equally likely, leading to free variation. Sociolinguistic driving forces can lead to one constraint being preferred over the other, thereby fixing the order of constraints and affecting language change in a certain direction (see Holt, 2003, p. 22). Within such a framework, 'external' factors (as opposed to internal factors) are often treated in terms of a 'sociocultural selection device' that 'utilizes optionality in the grammatical system' (Fruehwald, 2013, p. 28). Conversely, if optionality does not exist, no amount of social willingness will achieve change. Syntactic islands (e.g. *Did John ask* [*where Peter went to buy an apple*]? vs. **what did John ask* [*where Peter went to buy* $_t$]?) are barred by the grammar and will therefore never be utilised to perform social work – they are a 'sociolinguistic impossibility' (Fruehwald, 2013, p. 29). Under such a view, language change could be "complete" at some point, because a language could, in theory, arrive at a stage where all optionality within its grammar has been exploited; where all constraints have been fixed.

There is, however, vast evidence against such an assumption. Languages have changed from the beginning, otherwise one would not witness the plurality of languages and language families. No matter how many constraints grammar seems to impose on speakers, linguists regularly find themselves to return to language-external innovations in their explanations of what triggers changes in the grammar:

> The constraints isolated as relevant to shifts do not impose a uniformity of direction, nor is there any single constraint which remains undominated throughout the historic and current changes of the English long vowels. These constraints are sufficient to describe quite accurately the initial stage of various changes. Why one or another of the constraints takes the lead at a given time or in a given variety of the language is a matter of register-dependent innovations making their way into the grammar. (Minkova & Stockwell, 2003, p. 186)

At this point, I would like to wrap up. No-one has, to my knowledge, ever been able to identify non-trivial internal factors that are clearly independent from social factors. Even highly formalised internal factors at the level of grammar find themselves returning to 'register-dependent innovations'.

Over the timespan surveyed, internal factors have covered everything from 'automatic' changes in a linguistic system, to the adjustment of a linguistic system to achieve maximal dispersion, to statements like /e:/ is more likely to raise to /i:/ then fall to /a:/, to coarticulatory effects biasing phonologicalisation, to possibly innate constraints like 'Maximize the auditory distance between the nuclear vowel and the following glide' (Minkova & Stockwell, 2003, p. 173), 'An articulation which requires more effort is disfavored' (Minkova & Stockwell, 2003, p. 179) or 'Maximize the auditory distinctiveness of contrasts' (Minkova & Stockwell, 2003, p. 182). But none of these, as I hope to have shown in the above remarks, have been sufficient by themselves – certainly not to such an extent that one could, without reservation, speak of a narrow interface between language and society.

Still, from a historian's perspective, internal factors have served their purpose. They have always, in the spirit of the register discussion above, defined themselves in opposition to external factors. In the early days of variationist sociolinguistics, the language/society, change from below/above, internal/external distinction has been

largely made along the lines of availability to social commentary (see chapter 3). Social behaviour was construed in terms of rational choice, and everything that could not be captured by overt commentary in a speech community fell under internal factors. Only in the vernacular, free from social constraints, could one can find ”untouched” changes in the phonological system (see Coupland, 2016b). When scholars began to pay more attention to the social functionality of sound change below the level of conscious awareness, internal factors were rendered as a compensatory mechanism that repairs a disequilibrium of the phonological system. As counter-examples proliferated, internal factors have narrowed down to structural constraints, possibly part of UG, that guide changes in a certain direction, but even those are not protected from “being overridden” by social driving forces.

Internal factors, then, seem to have suffered a similar fate as Chomskyan syntax (see chapter 4). Once catch-all explanations of linguistic phenomena, they absconded when social, cultural, cognitive or other factors have started to “do the explaining”. Somewhere along the way, it apparently became agreed upon that when it comes to the transition, embedding and actuation of a language change, to follow Weinreich et al.’s (1968) terminology, external factors have primacy, and internal factors previously associated with these processes are probably void. (Meanwhile, the evaluation problem has become void too, because it hinges on a primacy of linguistic processes that is no longer needed.) This is where contemporary sociolinguistics seems to part from the orthodox Labovian doctrine. To return to the initial question, then, – i.e., whether the rise of third-wave variationism marks an ontological breach within sociolinguistics –, the answer is a Yes.

What remains an open question is how much revolutionary character one ascribes to third-wave variationism, and whether the described renunciation of a narrow interface between language and society in favour of a broader one is an epiphenomenon of a changing *Zeitgeist* altogether. In the 1960s, with the rise of Chomsky’s nativism, linguistics as an academic discipline underwent unprecedented “scientification”, elevating it to the status of a natural science on a par with biology and physics (or, at least, this is what linguists envisaged). Linguistics has always been eager to be a

"modern" science, though what counts as modern is, of course, dependent on sociohistorical context. In the 19th century, linguistics ran the risk of being swallowed up by psychology, which, back then, comprised mainly anti-positivistic theories of the mind that would today classify as philosophy (see Joseph, 2002, chapter 3). To treat language as a social phenomenon, as Whitney, Saussure and Meillet proposed, was a positivistic move that placed linguistics on a par with the, back then, modern empirical sciences (Joseph, 2000, section 4). In the mid-20th century, modernisation of linguistics came with the price that linguists had to scout around for phenomena that are distinctly linguistic in nature, and which are therefore *only* to be studied by linguists and not by, say, sociologists. Chomsky went down the rationalist road in his search for linguistic autonomy. Labov did not follow – or, rather, only followed half-heartedly, not least because 1960s generativist doctrines ran counter to his own sociology-leaned intuitions (see Figueroa, 1994, chapter 4) – but his journey likewise led him to posit quasi-mystical driving forces behind language change that are beyond the control of speakers. As time passed by, however, the envisaged linguistic autonomy proved to be difficult to adhere to on both sides, and after half a century of vigorous advocacy of a distinction between the linguistic and non-linguistic, it seems that the two are collapsing into a messy whole again (like the nature-culture opposition always does, as argued by Latour, 1991). Both UG and internal factors, when rendered too broadly, proved to be epistemologically expensive concepts, and both eventually had to bow to the fact that, at the end of the day, languages are spoken by people who, first of all, communicate to navigate life – not by ideal speaker-listeners in homogeneous speech communities, and neither by individuals who function as mere tokens of a heterogeneous superstructure.

CHAPTER 6: CONCLUSION

What I hope to have shown in this thesis is that, over the last 50 years, variationist sociolinguists have gradually given up a narrow interface between language and society in favour of a broader one. This process is not restricted to the third wave alone, as even what Eckert calls first-wave variationism – orthodox Labovian sociolinguistics – has undergone a significant reorientation from around the turn of the millennium that has considerably watered down the distinction between language-internal and language-external factors. This, however, has not been explicitly acknowledged by Labov. Somewhere between *Principles of Linguistic Change: Social Factors* (2001) and *Principles of Linguistic Change: Cognitive and Cultural Factors* (2010), he implicitly began to drop the notion of linguistic autonomy in favour of the performative nature of language change. He has not fully followed through with this reorientation – neither have third-wave variationists, for that matter –, and papers like Eckert and Labov (2017) are powerful reminders that the quasi-mystical belief in abstract driving forces behind language change is far from dead in contemporary sociolinguistics. Nonetheless, I locate in the incipient renunciation of the narrow interface between language and society a paradigm shift defying the autonomy of internal factors that has, for a long time, guided sociolinguistics in the study of large-scale phonological change.

From a historical perspective, internal factors have always defined themselves in opposition to language-external factors. This instantiated in academia an understanding that one can, without reservation, distinguish between social and 'linguistic' aspects of language use. Paradoxically, Labov has acknowledged from the start that an adequate theory of language change pushes the boundaries of such a narrow dichotomy:

> To explain a finding about linguistic change will mean to find its causes in a domain outside of linguistics: in physiology, acoustic phonetics, social relations, perceptual or cognitive capacities. [...] A set of propositions that relate general findings about language change to general properties of human beings or of human societies will certainly deserve to be called a theory of language change. (Labov, 1994, p. 5)

Nonetheless, sociolinguists have devoted themselves to the internal/external opposition for half a century, and the narrow interface between language and society is one fruit of their labour.

As argued in chapters 3 and 4, a narrow interface between language and society hinges on considerable explanatory power attributed to language-internal factors. Roughly up to the turn of the millennium, internal factors had to shoulder the responsibility of accounting for how complex linguistic systems evolve, over generations, below the level of conscious awareness of the speech community. Members of the speech communities had to "carry forward" a change by propagating advanced phonetic tokens to an endpoint that is predetermined by internal principles like Martinet's (1955) principle of maximal dispersion or nucleus-glide differentiation. None of these principles, however, ever fully determine sound changes. In later variationist work, they are therefore treated as mere tendencies that have to bow to the fact sound changes are, first of all, changes in registers that can never be abstracted away from the social surroundings in which they are embedded. What has become important is how social agents utilise register differences to situate themselves in the social landscape. Language change, in this understanding, is a vehicle that allows speakers to do social work. This is a considerable change of thinking compared to early-day variationism, and I think it is fair to say that it marks an ontological breach of considerable importance.

The fact that this reorientation is not restricted to third-wave variationism alone but to variationist sociolinguistics in general seems to be an epiphenomenon of a broader development within linguistics. Parallel to the downfall of internal factors, one can witness, almost simultaneously, the downfall of UG as it was envisaged by Chomsky in the 1960s. Once catch-all concepts for complex linguistic phenomena, both UG and internal factors have been considerably restricted over the years. In the case of UG, what is left of early phrase-structure days is a conjunction of a logical form and a phonetic/phonological form mediated by a simplified form of syntax. In the case of internal factors, what is left of structural principles "unfolding" themselves in a

material substratum (i.e., a speech community) are tendencies that can constrain how register alignments or disalignments are likely to occur.

I have argued in chapter 4 that, from a philosophical perspective, these developments share striking similarities, as they both challenge "linguistic autonomy" in their respective domain. Early UG, for instance, tried to restrict a complexity of linguistic phenomena to a genetically inherited psychological mechanism of the mind that enables language acquisition (or, in later work, the acquisition of an I-language) and that is somewhat prior to semantic aspects of language. The representational systems needed to capture such I-languages in a form that would account for all the syntactic structures of known languages became ever more complex, up to the point that scholars began to doubt that they realistically capture actual cognitive processes of language learners. As an answer, Chomsky reconceived UG in simpler terms, but he could only do so at the expense of explanatory value attributed to it. Compared to the 1960s and 70s, significantly less in language acquisition is nowadays explained by UG, and much more is attributed to e.g. the role of caretakers and language socialisation in general (but Chomsky has never shown much interest in such matters).

Internal factors seem to be suffering a similar fate. Once, they captured all linguistic behaviour that was deemed to be beyond the control of speakers – all those 'more abstract principles of change', to echo Eckert and Labov (2017, p. 467). In the 1960s and 70s, conscious awareness was an important determinant in deciding whether a change was in control of speakers or not; whether a change could be classified as "internal" or "external", "within" or "without", "below" or "above". Roughly 40 years later, when third-wave variationists have started hammering home that social performativity transcends conscious awareness, the above distinctions became redundant. Internal factors, much like Chomsky's UG, had to forfeit much explanatory value when scholars started to treat them as stand-ins for socially-meaningful processes.

That linguists have readily adopted both UG and internal factors despite their epistemologically problematic nature can be considered a child of its time. Doing

modern linguistics in the second half of the 20th century meant restricting one's research domain to phenomena that are, allegedly, distinctly linguistic in nature. The price of this was compartmentalisation and parochialism, which still haunts many linguists who try to push the boundaries, but it needed to be paid in the interest of creating a scientific paradigm that is on a par with other "scientific" disciplines such as biology or physics. The whole history of modern linguistics shows that linguists have always "gone with the flow" in order to appear modern at that time. From Humboldtian ideas that sought to reconcile languages with ideas of the national soul, to Neogrammarian psychologism, to Saussurean sociologism, to Chomskyan nativism, back to 21st century sociologism – it covers almost everything.

I have tried to show in chapter 4 that this does not prohibit talking about scientific progress in the broad sense, and that scientific realism steers a sensible middle course that can reconcile historical relativism with a notion of progress that acknowledges theory-dependence of truth. From such a perspective, it is undoubtedly true that science can never be separated from the *Zeitgeist* it is part of. Geocentrism, as a case in point, stemmed from the belief that God created mankind in his image. Given that mankind populates planet Earth, it would have been insulting to God to not place it at the centre of the universe.

One must not surrender to the belief that modern science is exempt from similar constraints. The internal-external opposition, I hope to have shown, is such a paradigm constraint, albeit smaller-scaled. Granted, third-wave variationists did not have to challenge an entire religious worldview as Copernicus did. Still, their implicit renunciation of the narrow interface between language and society, and the rigid distinction of internal and external factors with it, is a form of iconoclasm reminiscent of 16th and 17th-century scholars who have stood up against the establishment to fight for their version of things – the "real truth".

If this truth means that we linguists can no longer lay claim to an area of investigation that is distinctly ours; if treating internal factors as stand-ins for socially performative phenomena means getting rid of our academic autonomy; I have no problem with this.

Language, and human behaviour in general, is too complex a phenomenon to compartmentalise. Then again, I am a PhD student whose salary does not yet depend on it. Maybe, when I re-read this in 20 years from now, I will chuckle. But this does not make it any less true.

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